

Innovations to prevent illnesses  
and improve quality of life

- GastroPanel®
- Quick tests
- Laboratory tests
- Acetaldehyde binding product
- Consumables
- Monoclonal antibodies

# Greetings from the CEO

---

At Biohit, everything we do is guided by our mission: Innovating for health. Our goal is simple, to make healthcare more effective, more accessible, and more sustainable. We believe that the right diagnostic tools can transform patient care, helping doctors focus on those who need it most and sparing others from unnecessary procedures.

Our vision is to be the global premium expert in gastrointestinal health. This is not just an ambition, it is the path we are already walking. Biohit solutions are trusted by healthcare professionals worldwide. Together, we are building a new standard in gastrointestinal diagnostics, combining science, practicality, and global experience.

A cornerstone of this work is GastroPanel®, our unique non-invasive test for stomach health. GastroPanel® is changing the way dyspepsia and gastric cancer risk are managed. It helps identify patients who truly need gastroscopy, while allowing the majority to be safely treated in primary care. For symptomatic patients, the test provides valuable insights that guide better treatment decisions. For asymptomatic individuals, it serves as an effective screening tool to detect *Helicobacter pylori* – a class 1 carcinogen – and atrophic gastritis, the strongest known risk factor for gastric cancer. GastroPanel® is backed by solid clinical evidence, including a recent study from Homerton University Hospital in London, which confirmed its value as a reliable and accurate triage tool. The impact is clear: better care for patients, smarter use of resources, and reduced strain on healthcare systems.

Looking ahead, Biohit will continue to bring innovative solutions that support early detection, effective treatment, and healthier lives. We are proud to partner with healthcare professionals around the world who share this mission. Together, we can make a lasting difference in gastrointestinal health.

With appreciation,  
Jussi Hahtela  
CEO, Biohit Oyj

# Table of Contents

---

Discover our innovative diagnostic solutions

	<b>GastroPanel®</b>
5	GastroPanel® Concept
6	GastroPanel® quick test NT
7	GP Reader NT
8	GastroPanel® Unified ELISA
	<b>BIOHIT quick tests</b>
10	BIOHIT ColonView® quick test (FIT)
11	Lactose Intolerance quick test
12	<i>Helicobacter pylori</i> quick test
13	BIOHIT <i>Helicobacter pylori</i> UFT300
14	BIOHIT Celiac quick test
15	Gluten Immunogenic Peptide (GIP) tests
	<b>BIOHIT Laboratory tests</b>
17	BIOHIT Calprotectin
18	BIOHIT Active B12 (HoloTC)
19	BIOHIT Total 25OH Vitamin D
	<b>Acetaldehyde Binding Products</b>
21	Acetaldehyde
22	Acetium® capsule
23	Acetium® lozenge
	<b>Consumables</b>
25	BIOHIT FAEX® Sample System
	<b>BIOHIT Monoclonal Antibodies</b>
27	Efficient tools for research in the area of cellular pathology, neurology and oncology
28	BIOHIT Monoclonal Antibodies Specifications
29-30	<b>References</b>
31	<b>Products</b>



See all Biohit solutions – visit our site  
[www.biohithealthcare.com](http://www.biohithealthcare.com) now!

# GastroPanel®

Innovation in the assessment of stomach health

GastroPanel® innovation has been developed as a result of decades of research in order to reliably diagnose *Helicobacter pylori* infection and atrophic gastritis. Until the development of GastroPanel, gastroscopy and biopsy examination were the only reliable methods for the diagnosis of these conditions.

## The GastroPanel® Concept

Screening and diagnosis of asymptomatic and dyspeptic patients

Gastrointestinal health faces growing challenges worldwide, driven by an aging population and limited healthcare resources. In addition, the increasing prevalence of gastrointestinal disorders underscores the urgent need for innovative solutions and improved care strategies. Addressing these challenges requires a proactive approach that combines early detection, patient education, and resource optimization to ensure better gastrointestinal health outcomes for all.

### Challenges in gastrointestinal health

- Increasing prevalence of gastrointestinal disorders
- Aging population
- Scarce healthcare resources

### Need for reliable and cost-effective solutions

- Safe, non-invasive and efficient way to triage dyspepsia patients
- Prioritize patients with urgent need for gastroscopy
- Reduce unnecessary gastroscopies in low-risk patients
- Efficient screening tool for early detection of risk factors or stomach cancer

### The solution - GastroPanel®

- As a triage tool, it helps healthcare professionals prioritize patients for further investigations (e.g. gastroscopy)
- Intended as the first-line diagnostic test for patients suffering from dyspepsia
- Cost-effective and easily scalable diagnostic tool that detects the most clinically relevant precursor to gastric cancer
- Patient friendly, non-invasive, simple blood test to evaluate the function and structure of stomach mucosa
- Backed by on strong scientific and clinical evidence

### Benefits

- Faster access to clinical triage and earlier detection of precancerous lesions
- Patients can be treated conservatively in primary care
- Cost savings from fewer unnecessary appointments and procedures
- Improves patient safety by speeding up the referral to further examinations, treatment and follow-up
- Increases patient satisfaction through non-invasive testing methods
- As a Point-of-Care test, delivers fast, actionable results in any clinical settings

GastroPanel® measures four stomach specific biomarkers in a blood sample to detect *H. pylori* infection, atrophic gastritis and/or high acid output and guide referrals for gastroscopy and biopsy examination.

### Challenges in GI health



INCREASE PREVALENCE OF GASTROINTESTINAL DISORDERS



AGING POPULATION



SCARCE HEALTHCARE RESOURCES

# GastroPanel® quick test NT

GastroPanel® quick test NT is the Point-of-Care (POC) version of the well-established GastroPanel® test.

It is a semi-automated immunological lateral flow test for the simultaneous quantitative detection of pepsinogen I (PGI), pepsinogen II (PGII), and gastrin-17 (G-17) and qualitative detection of antibodies against *Helicobacter pylori*. This 15 minute test can be performed on simultaneous human fingerprick whole blood, venous whole blood or EDTA plasma samples. GastroPanel quick test NT is used with the GP Reader NT device (REF 740450). The test is to be used by healthcare professionals, either in a laboratory or Point-of-Care setting.

GastroPanel quick test NT is intended for diagnosing *H. pylori* infection and atrophic gastritis (AG) from patients with dyspeptic symptoms or at risk of developing malignant cellular changes in the stomach mucosa. In addition, the test can aid in screening settings to identify individuals at risk whomay require additional examinations or treatment.



## Product specification

<b>Sample type</b>	Plasma and venous whole blood Fingerprick whole blood
<b>Test principle</b>	Immunofluorescent lateral flow test
<b>Biomarkers</b>	Pepsinogen I (PGI), pepsinogen II (PGII), gastrin-17 (G-17), <i>Helicobacter pylori</i> ( <i>Hp</i> ) antibodies
<b>Storage</b>	2 to 30°C
<b>Test results</b>	15 minutes



### GastroPanel® quick test NT

REF	Product	Qty
602410	For plasma and venous whole blood	30 tests

### GastroPanel® quick test NT

REF	Product	Qty
602420	For fingerprick whole blood	30 tests



# GP Reader NT

GP Reader NT is an automated instrument for the quantitative determination of various analytes in human samples, such as whole blood, plasma or fecal samples, by measuring fluorescence signals from lateral flow test cassettes.

GP Reader NT is intended for use with compatible fluorimetric lateral flow immunoassay (FLFIA) test kits, such as GastroPanel® quick test NT (REF 602410 and REF 602420), as an aid in the diagnosis, screening, or monitoring of medical conditions, as specifically defined, along with the characteristics of the testing population, required specimen, and detected analyte, in the intended purpose of the individual test kit it is used with.

## Product specification

<b>Easy to use</b>	Large bright touch screen display, intuitive user interface No special training requirements
<b>User friendly</b>	Enhanced functionality with large buttons, multiple language support Fast - measurement time ~30 s
<b>Maintenance free</b>	No additional costs
<b>Benchtop</b>	Can be used in any clinical settings, weight 4,0 kg
<b>Onboard printer</b>	Optional instant print out of report
<b>Large memory capacity</b>	Up to 100 000 results records can be stored
<b>Connectivity to LIS</b>	Results automatically sent to Laboratory Information System
<b>Interpretation</b>	Includes interpretation of results to aid in diagnosis
<b>Instrument software</b>	No installation needed, software updates through USB-port
<b>Quality control</b>	QC cassette available



### GP Reader NT

REF	Product	Product
740450	GP Reader NT	1
740470	QC Cassette	1



See all Biohit solutions – visit our site [www.biohithealthcare.com](http://www.biohithealthcare.com) now!



# GastroPanel® Unified ELISA

GastroPanel® Unified is based on the ELISA (enzyme-linked immunosorbent assay) principle and hence can be used with various analysers (manual or automated ELISA systems). The kits feature unified reagents and reaction conditions, bringing efficiency and convenience to a highly reliable test format.

**GastroPanel® Unified** - GastroPanel Unified consist of four ELISA test kits to be used in combination. The tests are *in vitro* microplate-based quantitative enzyme-linked immunosorbent assays (ELISA) for the determination of:

## Pepsinogen I (PGI)

- Indicator of the structure and function of the gastric corpus mucosa

## Pepsinogen II (PGII)

- Inflammation marker of the entire gastric mucosa

## Gastrin (G-17)

- G-17 with PGI/PGII ratio are indicators of gastric corpus atrophy

## IgG antibodies to *Helicobacter pylori*

- Indicator of *H. pylori* infection

The dedicated software GastroSoft™ can be used to interpret and report the combination of all four test results of GastroPanel Unified. GastroSoft is a software application designed to assist clinicians / general practitioners in interpreting GastroPanel® test results along side anamnestic information. The GastroPanel report is intended for healthcare professionals only. The final responsibility of the diagnosis and treatment always rests with the patient's doctor.



See all Biohit solutions – visit our site [www.biohithealthcare.com](http://www.biohithealthcare.com) now!

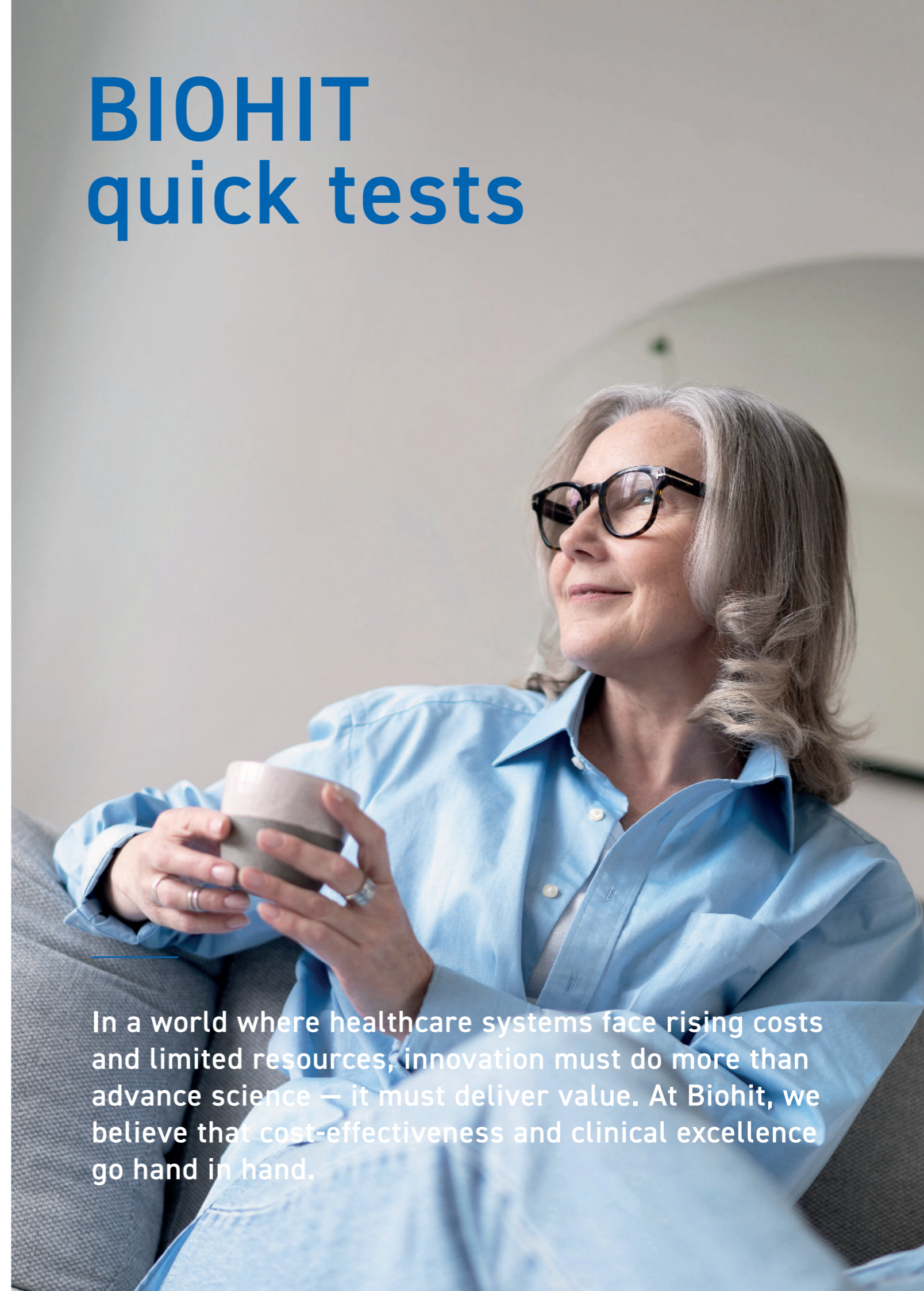


## GastroPanel® Unified

REF	Product	Qty
606400	GastroPanel® Unified	1 package
606010	GastroPanel® Pepsinogen I	96 wells
606020	GastroPanel® Pepsinogen II	96 wells
606035	GastroPanel® Gastrin-17	96 wells
606040	GastroPanel® <i>Helicobacter pylori</i>	96 wells



# BIOHIT quick tests



In a world where healthcare systems face rising costs and limited resources, innovation must do more than advance science – it must deliver value. At Biohit, we believe that cost-effectiveness and clinical excellence go hand in hand.

# BIOHIT ColonView® quick test (FIT)

**Detects bleeding derived from lower Gastrointestinal (GI) tract** - BIOHIT ColonView® quick test is an immunological lateral flow test which detects hemoglobin (Hb) and hemoglobin-haptoglobin (Hb/Hp) complex (i.e., degraded hemoglobin) from a stool sample. The test can be used to detect bleeding derived from the lower parts of the GI tract. Due to the Hb/Hp complex, ColonView quick test is highly effective in detecting bleeding from the entire colorectal tract, including the proximal colon. This gives the ColonView test a superior sensitivity and specificity to detect bleeding cancer tumors as well as their precursors (smaller polyps and adenomas).

**One sample is enough for dual testing** - The clever design of the ColonView sampling tube eliminates patient errors and ensures that there will always be the correct sample amount. The sampling tube is also a closed system which makes it hygienic to handle by the patient, safe during transportation, and precise in the laboratory. The sampling tube contains all the necessary reagents and no additional accessories are needed for the analysis. One sample is enough to test both Hb and Hb/Hp complex.



### Features

- Detects bleeding from proximal and distal lesions
- Adenoma and carcinoma: sensitivity 97% and specificity 85%
- Hygienic sampling, safe transportation and accurate analysis
- No dietary restrictions before sample collection
- Advanced fecal immunochemical test (FIT)

### Product specification

<b>Sample type</b>	Stool
<b>Test principle</b>	Immunological detection of Hb and Hb/Hp complex
<b>Kit components</b>	Test cassettes, sample collection package (sample collection tube, specimen collection paper, and sample collection instruction) and Instructions for Use
<b>Storage</b>	2 to 30°C
<b>Test results</b>	15 minutes



### BIOHIT ColonView® quick test (FIT)

REF	Product	Qty
602250.02	BIOHIT ColonView® quick test (FIT)	30 tests
602390	BIOHIT ColonView® QT Control	1 bottle



# Lactose Intolerance quick test

**Confirmed results during gastroscopy** - The Lactose Intolerance quick test detects all types of lactase deficiency from biopsy specimens. This gives added value to gastroscopies with minimum effort. The test is based on the normal lactase enzyme reaction and can therefore detect both lactase deficiency and indicate the enzyme's functionality. The Lactose Intolerance quick test is not only a sensitive diagnostic tool, but it has also been found to be more accurate than lactose breath tests in predicting clinical response to a lactose-free diet.

**Easy testing from a duodenal biopsy specimen** - The test procedure of the Lactose Intolerance quick test is fast and simple. The biopsy specimen is placed in the well of the test plate and test reagents are added to the sample. A clear color change indicates the test result within 20 minutes enabling testing and reporting during the procedure.



### Features

- Simple color chart interpretation
- All reagents ready-to-use
- Sensitivity 95%, specificity 100%
- Superior sensitivity compared to lactose breath test

### Product specification

<b>Sample type</b>	Duodenal biopsy specimen
<b>Test principle</b>	Duodenal lactase activity
<b>Kit components</b>	Test plates, reagent bottles (1, 2 and 3), Interpretation color chart, Instructions for Use
<b>Storage</b>	2 to 8°C
<b>Test results</b>	20 minutes



See all Biohit solutions – visit our site [www.biohithealthcare.com](http://www.biohithealthcare.com) now!

### Lactose Intolerance quick test

REF	Product	Qty
602010	Lactose Intolerance quick test	25 tests
602012	Lactose Intolerance quick test	10 tests
602018	BIOHIT Lactase Control	1 bottle



# Helicobacter pylori quick test

**Easy testing from a biopsy specimen** - The *Helicobacter pylori* quick test detects *H. pylori* infection from a biopsy sample during gastroscopy. *Helicobacter pylori* quick test can be used to diagnose *H. pylori* infection or to check the success of eradication therapy. The positive result for *H. pylori* is ready in just 2 minutes, and the final confirmation of a negative test result is ready in 30 minutes.

Using the *Helicobacter pylori* quick test is an easy one-step procedure. The biopsy specimen is immersed into the gel medium, and if *H. pylori* urease is present in the specimen, a red color develops in the gel. Interpretation of the indicator color is simple and does not require any specialist training.

**RESULTS IN**



**FROM BIOPSY**

**Features**

- Ready-to-use test kit
- Gel medium, no need for reagents
- Clear visual interpretation
- Sensitivity 100%, Specificity 93% (ref. to histology)
- Testing and reporting during gastroscopy

**Product specification**

Sample type	Gastric biopsy specimen
Test principle	<i>H. pylori</i> urease activity
Kit components	Test plate with gel medium, Instructions for Use
Storage	2 to 8°C
Test results	2-30 minutes



**Helicobacter pylori quick test**

REF	Product	Qty
602015	<i>Helicobacter pylori</i> quick test	50 tests
602017	BIOHIT <i>Helicobacter pylori</i> Control	1 bottle



# BIOHIT Helicobacter pylori UFT300

**Ultra-fast *H. pylori* detection from a biopsy** - The BIOHIT *Helicobacter pylori* UFT300 is a true quick test for the detection of *H. pylori* from a biopsy specimen. The biopsy taken during gastroscopy, can be tested immediately to diagnose *H. pylori* infection or to determine the success of eradication therapy. The test results are ready in just 5 minutes enabling diagnosis and reporting at the same time. This saves the patient from an unnecessary follow-up visit to the doctor for their test results.

The BIOHIT *H. pylori* UFT300 quick test has excellent sensitivity and specificity compared to gold standards which makes it a highly reliable and accurate tool for diagnostics.

**Biopsy testing could not be easier** - The BIOHIT *H. pylori* UFT300 quick test is easy and effortless to use. The biopsy specimen is placed into the test tube or well of the plate and mixed with the test reagent. A clearly visible color change indicates the presence of *H. pylori* in the specimen. The procedure is safe and efficient for the user, and the interpretation of the result doesn't require specialist training.

**RESULTS IN**



**FROM BIOPSY**

**Features**

- Ready-to-use test kit
- Clear visual interpretation
- Sensitivity 94.5%, Specificity 100%
- Testing and reporting during gastroscopy

**Product specification**

Sample type	Gastric biopsy specimen
Test principle	<i>H. pylori</i> urease activity
Kit components	Test tube/plate, reagent, Instructions for Use
Storage	Room Temperature, 18 to 25°C
Test results	5 minutes (both positive and negative)



**BIOHIT Helicobacter pylori UFT300 with plate**

REF	Product	Qty
602005PLA	BIOHIT <i>Helicobacter pylori</i> UFT300	5 tests
602019PLA	BIOHIT <i>Helicobacter pylori</i> UFT300	50 tests
602017	BIOHIT <i>Helicobacter pylori</i> Control	1 bottle



**BIOHIT Helicobacter pylori UFT300 with tube**

REF	Product	Qty
602019	BIOHIT <i>Helicobacter pylori</i> UFT300	50 tests
602021	BIOHIT <i>Helicobacter pylori</i> UFT300	100 tests
602017	BIOHIT <i>Helicobacter pylori</i> Control	1 bottle



# BIOHIT Celiac quick test

**Accurate results from fingertip blood** - The BIOHIT Celiac quick test enables non-invasive, accurate and patient-friendly testing of celiac disease from just a drop of blood. The test is based on the detection of anti-tissue transglutaminase antibodies (tTG; IgA, IgG and IgM). The test therefore delivers a superior sensitivity, especially in patients with IgA deficiency.

**Easy testing at the Point-of-Care** - The blood sample for BIOHIT Celiac quick test is taken as a fingerprick sample. The sample is placed on a lateral flow test cassette along with a buffer solution. The test result is clearly visible within 10 minutes.

**RESULTS IN**



**Features**

- Fingerprick sample collection
- Detects antibodies (IgA/IgG/IgM) against human tissue transglutaminase
- Clear visual interpretation

**Product specification**

<b>Sample type</b>	Fingerprick / whole blood, plasma or serum samples
<b>Test principle</b>	Immunochromatographic lateral flow test
<b>Kit components</b>	Lancets, micropipettes, test cassettes, diluent buffer, Instructions for Use
<b>Storage</b>	2 to 8°C
<b>Test results</b>	10 minutes



**BIOHIT Celiac quick test**

REF	Product	Qty
602070	BIOHIT Celiac quick test	20 tests
602080	BIOHIT Celiac quick test	50 tests



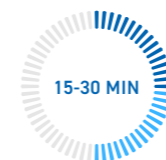
# Gluten Immunogenic Peptide (GIP) tests

**Reliable monitoring of gluten-free diet adherence** - The GIP test detects Gluten Immunogenic Peptides (GIP) – specific fragments of gluten that resist digestion and trigger immune responses in individuals with coeliac disease. Because GIP is excreted in stool and urine after gluten ingestion, its detection provides a direct and accurate marker for dietary gluten exposure.

Using G12 and A1 monoclonal antibodies, which recognize the highly immunogenic 33-mer peptides of  $\alpha$ -gliadin, the GIP test offers high sensitivity and specificity for monitoring gluten-free diet (GFD) compliance.

Clinical studies show that positive GIP results correlate with intestinal mucosal damage too, while negative results indicate a low probability of ongoing injury – making GIP testing a valuable tool for ensuring both effective dietary management and intestinal recovery.

**RESULTS IN**



**Features**

- Easy-to-use
- Detects fragments of gluten
- Effective monitor for gluten-free diet adherence
- Clear visual interpretation

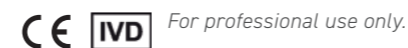
**Product specification**

<b>Sample type</b>	Urine /stool samples
<b>Test principle</b>	Immunological lateral flow test / ELISA
<b>Storage</b>	15 to 30°C (iVYCHECK rapid test, Gluten Detect) 4 to 8°C (iVYLISA, ELISA)
<b>Test results</b>	15-30 minutes (lateral flow tests)



**Gluten Immunogenic peptide (GIP) tests**

REF	Product	Qty
KT-5737	iVYCHECK GIP Stool	25 tests
KT-6411	iVYCHECK GIP Urine	25 tests
KT-5739	iVYLISA GIP Stool	96 wells



**GIP test is also available as GlutenDetect home test**

REF	Product	Qty
KT-6414	GlutenDetect Urine	1 test
KT-6418	GlutenDetect Urine	6 tests
KT-6416	GlutenDetect Urine	12 tests
KT-6355	GlutenDetect Stool	2 tests

*Not an IVD product.*

# BIOHIT Laboratory tests

Our mission, “Innovating for Health”, describes our innovative products and services, which aim to promote medical research for early diagnosis, and prevent serious illnesses.

## BIOHIT Calprotectin

BIOHIT Calprotectin test is a quantitative in vitro enzyme-linked immunosorbent assay (ELISA) aiding the diagnosis and monitoring of active inflammation in the small or large intestine such as inflammatory bowel disease (IBD) (e.g. ulcerative colitis or Crohn's disease) by detecting calprotectin in stool samples.

BIOHIT Calprotectin is a quantitative test which provides a reliable differentiation between IBD and irritable bowel syndrome (IBS). IBD is a disease classification characterized by chronic inflammation and includes ulcerative colitis and Crohn's disease. Patients suffering from either IBD or IBS may experience similar symptoms and a clinical examination alone may not be sufficient to give a specific diagnosis. Furthermore, these conditions may appear from early childhood to late adulthood and the diagnosis is often delayed due to vague symptoms or reluctance to perform endoscopy. In organic disorders like IBD, the concentration of fecal calprotectin increases significantly, whereas with functional disorders like IBS this does not occur.

### Applications

- Differentiates IBD from IBS
- Monitoring of disease activity and mucosal healing in IBD patients
- Relapse prediction (loss of therapeutic response)
- Helps to support the practitioner in making informed decisions concerning medication, monitoring treatment and the need for medical procedures such as endoscopy or surgery

### Product specification

Sample type	Stool
Extraction device	BIOHIT Extraction tube
Test principle	Enzyme-linked immunosorbent assay (ELISA)
Kit components	96 well microplate, test reagents, calibrators and controls
Storage	2 to 8°C



See all Biohit solutions – visit our site [www.biohithealthcare.com](http://www.biohithealthcare.com) now!

### BIOHIT Calprotectin

REF	Product	Qty
602260	BIOHIT Calprotectin	96 wells
602270	BIOHIT Extraction tubes	50 pcs



# BIOHIT Active B12 (HoloTC)

BIOHIT Active B12 (HoloTC) test is a quantitative in vitro enzyme-immunoassay (EIA) for determination of holotranscobalamin (HoloTC) in human serum aiding in the diagnosis and treatment of vitamin B12 deficiency.

The traditional method of diagnosing vitamin B12 deficiency has been to measure the concentration of total vitamin B12 in serum. The total vitamin B12 concentration essentially reflects vitamin B12 which is bound to its two carrier proteins forming holohaptocorrin (holoHC) and holotranscobalamin (holoTC). Whilst HoloHC accounts for 70% - 80% of the vitamin B12 in serum, only holoTC (active vitamin B12) can be used by human cells. Measurement of total vitamin B12 can hence give erroneous results because it measures the vitamin B12 which is in circulation but does not indicate the active vitamin B12 proportions that is available to the cells of the body.

The BIOHIT Active B12 (HoloTC) test provides a solution to the above diagnostic paradox: this test directly measures (holoTC) – the biochemically active form of vitamin B12 – in human serum. This test is well suited for the screening of patients with a suspected vitamin B12 deficiency. BIOHIT Active B12 test can also be used for confirming the vitamin B12 status in the large number of patients who get an inconclusive result from total vitamin B12 tests.

## Features

- Measures the concentration of active vitamin B12 (holotranscobalamin) available to the cells
- Unlike total B12 kits, no issues with Intrinsic Factor Blocking Antibody (IFBA) interferences
- Numerous clinical studies proving the performance of active B12 over total B12

## Product specification

<b>Sample type</b>	Serum
<b>Test principle</b>	Enzyme-immunoassay (EIA)
<b>Kit components</b>	96 well microplate, test reagents, calibrators and controls
<b>Storage</b>	2 to 8°C



### BIOHIT Active B12 (HoloTC)

REF	Product	Qty
602290	BIOHIT Active B12 (HoloTC)	96 wells



# BIOHIT Total 250H Vitamin D

BIOHIT Total 250H Vitamin D test is a quantitative in vitro enzyme-linked immunosorbent assay (ELISA) for the determination of 25-hydroxyvitamin D2 and D3 (25OHD2 and 25OHD3) in serum and plasma aiding in the diagnosis of Vitamin D deficiency, insufficiency or intoxication.

Vitamin D has multiple roles in the human body. In addition to its well-established role in the regulation of calcium absorption and promoting bone growth, it is recognized for other health benefits including reducing risk of diseases such as type 1 diabetes and common cancers.

The best indicator of vitamin D status is the serum concentration of 250H vitamin D. For a correct diagnosis of vitamin D deficiency, the assay must recognize two vitamins important in the human body, vitamin D2 and D3.

By detecting both 250H vitamin D2 and D3, the kit provides clinically relevant information on vitamin D status. Reliability of the results is assured by validation against the ID-LC - MS/MS Reference Measurement Procedure (Ghent method) as approved by the Vitamin D Standardization Program (VDSP) with R=0.94.

## Features

- Detects both 250H vitamin D2 and D3 for a clinically meaningful assessment of vitamin D status
- Calibrated against the ID-LC-MS/MS Reference Measurement Procedure

## Product specification

<b>Sample type</b>	Serum or EDTA-plasma
<b>Test principle</b>	Enzyme-immunoassay (EIA)
<b>Kit components</b>	96 well microplate, test reagents, calibrators and controls
<b>Storage</b>	2 to 8°C

### BIOHIT Total 250H Vitamin D

REF	Product	Qty
602310.02	BIOHIT Total 250H Vitamin D	96 wells



# Acetaldehyde Binding Products

Acetium® is a patented family of consumer products developed to eliminate acetaldehyde, a common carcinogenic substance.

## Acetaldehyde

**A group I human carcinogen to which we are exposed on a daily basis**

**Group I carcinogen** - The World Health Organization (WHO) has classified acetaldehyde contained in alcoholic beverages and endogenously produced from alcohol as a Group I human carcinogen. This means that acetaldehyde is in the same group as asbestos and tobacco. Continuous exposure to acetaldehyde increases the risk of cancer.

**Where is acetaldehyde present?** Alcohol and tobacco are the major sources of acetaldehyde. Acetaldehyde is the most significant byproduct of alcohol metabolism and one of the most harmful substances in tobacco smoke.

In addition, acetaldehyde is present in foods. It is particularly abundant in food produced by fermentation, such as alcoholic beverages, vinegar, dairy products, home-brewed beer and mead. In some foods, acetaldehyde occurs naturally, such as in fruits and fruit-based products.

Due to its pleasant fruity smell, acetaldehyde is also used as a flavoring in the manufacture of yoghurts, sweets, pastries, fruit juices and alcoholic beverages.

**Acetaldehyde in the mouth and stomach** - Acetaldehyde in tobacco smoke dissolves easily in saliva and is distributed through the throat to the stomach. Another significant source of acetaldehyde in the body is microbial metabolism.

The normal microbial flora within the body produces acetaldehyde by oxidizing ethanol and by fermentation from sugar. Yeasts and bacteria belonging to the normal microbial habitat of the mouth are constantly distributed to the stomach with saliva. In a normal, healthy stomach, hydrochloric acid (HCl) can kill the microbes. In some people, acid-producing cells of the mucous membrane of the stomach disappear due to atrophy of the mucous membrane (a condition called atrophic gastritis), and therefore microbes are able to colonize and multiply in the stomach and produce acetaldehyde. People who have taken antacid medicines for a long time to treat acidic stomach conditions are also at risk of microbial growth in the stomach. Unlike the liver, the mucous membrane of the digestive tract and the microbes of the stomach are not able to process acetaldehyde and turn it into acetic acid and water. Therefore, an abundance of acetaldehyde accumulates in the saliva, anacidic stomach, and the lower digestive tract.

*Helicobacter pylori* is a bacterium capable of surviving in acidic stomachs and in chronic cases - can cause atrophic gastritis. In addition, *H. pylori* produces acetaldehyde.

**Millions are among the risk groups** - People in certain risk groups are significantly more exposed to acetaldehyde than others. If a person belongs to one of the following groups, acetaldehyde is an increased risk factor to their health:

- Smokers
- Those with an acid-free or a low-acid stomach
- Those who use acid-suppression medicines to treat heart burn or upper abdominal discomfort and pain
- Individuals with a chronic *H. pylori* infection
- Genetic predisposition to slower acetaldehyde metabolism



See all Biohit solutions - visit our site  
[www.biohithealthcare.com](http://www.biohithealthcare.com) now!

# Acetium® capsule

## Protects stomach

Acetium® capsule protects the gastric mucosa from acetaldehyde in people who have an acid-free stomach, for example in the case of chronic atrophic gastritis or prolonged proton pump inhibitor (PPI) use. Acetium capsules contain L-cysteine, which is a natural amino acid. L-cysteine effectively binds acetaldehyde locally in the stomach.

The World Health Organization (WHO) has classified acetaldehyde contained in alcoholic beverages and endogenously produced from alcohol as a Group I human carcinogen.

When an individual takes antacid medicines on a regular basis or suffers from an anacidic (achlorhydric) stomach, the bacteria and yeasts from the mouth can colonize the stomach. These bacteria and yeasts produce acetaldehyde every time the individual consumes alcoholic beverages and food that contains alcohol or sugar.

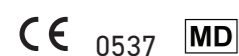
*Helicobacter pylori* thrives in the stomach even in the presence of acid and chronic infection can lead to an acid-free stomach, due to atrophic gastritis. In addition, *H. pylori* produces acetaldehyde.

### Features

- Protects the stomach, especially in individuals who suffer from an anacidic (low- or no-acid) stomach, take antacid medicines, H<sub>2</sub>-blockers or PPIs.
- Effectively removes acetaldehyde when taken during meals and alcohol consumption

### Acetium® capsule

REF	Product	Qty
620140	Acetium® 100 mg (fi-sv-en)	4 x 15 blisters
620095	Acetium® 100 mg (ita-ger-fra)	4 x 15 blisters



# Acetium® lozenge

## Helps quit smoking

Acetium® lozenge is a nicotine-free smoking intervention product intended for those who want to quit smoking. It is easy to use: take one lozenge with every cigarette smoked. Smoking cessation with Acetium takes on average 3-6 months of regular use. Regular use of Acetium reduces the pleasure of smoking and changes the taste of the cigarette, therefore helping to quit smoking.

Acetium lozenge contains L-cysteine, which is a natural amino acid. L-cysteine effectively binds the acetaldehyde in saliva derived from cigarette smoke.

L-cysteine removes up to 90% of the acetaldehyde dissolved into saliva during smoking. The lozenge dosage is 1 or 2 lozenges during smoking. The recommended maximum daily dose is 40 lozenges.

### Features

- Removes acetaldehyde from saliva during smoking
- Natural amino acid as an active ingredient
- Sensations of smoking change during intervention
- Tooth-friendly, contains xylitol. Poor oral hygiene increases local acetaldehyde formation
- Protects mouth from carcinogenic acetaldehyde

### Acetium® lozenge - quit smoking

REF	Product	Qty
620430	Acetium® lozenge - quit smoking	10 x 30 lozenges



### Acetaldehyde is an increased risk factor to your health if:

- You are suffering from an anacidic (low- or no-acid) stomach
- You are taking antacid medication, H<sub>2</sub>-blockers or PPI
- You are suffering from a chronic *H. pylori* infection and/or atrophic gastritis

### Acetium® lozenge is a breakthrough in smoking cessation therapy:

- Acetium does not contain nicotine nor maintain addiction to nicotine
- Acetium contains only safe ingredients that are commonly found in foods
- Acetium is devoid of the side effects of conventional smoking intervention methods (such as nicotine dependence and possible adverse side effects of medicines)

# Consumables



Essential consumables for sample collection, preparation, and analysis, supporting the performance of diagnostics, instruments and workflows.

## BIOHIT FAEX® Sample System

For the collection and handling of stool samples

The BIOHIT FAEX® Sample System is a multifunctional fecal sample collection tube that simplifies the process from patient sample collection to laboratory analysis. This unique product is designed to address the dual challenges of patient convenience and laboratory efficiency, ideally complementing any manufacturer's diagnostic kit or clinical workflow.

Patients often find stool sample collection inconvenient and stressful. The innovative BIOHIT FAEX Sample System is ergonomically designed to make this process as straightforward and userfriendly as possible. The collection stick is engineered for accurate and precise stool pick-up, and the stool sample is solubilized into liquid within the tube upon collection, ready for diagnostic testing. This is combined with the unique collar design, which efficiently removes and retains excess sample, ensuring safe handling and hygienic disposal of excess stool.

The tube fits seamlessly into existing tube racks and automated analysers - with dimensions similar to standard blood tubes - and its robust design even enables centrifugation up to 4,000 x g. The integrated dropper function brings further benefits enabling precise and reproducible dispensing, making it ideal for lateral flow and rapid test kits as well as automated immunoassays. And when samples need to be stored, simply attach the top cap for secure long-term storage.

Unlike traditional sample collection tubes, this product serves for multiple diagnostic purposes. It can be filled with common buffer solutions to suit a variety of diagnostic stool applications, including ELISAs, chemiluminescence assays, lateral flow tests and other proprietary test kits.



### Features

- Accurate and precise stool collection
- Unique collar design to remove excess efficiently
- Fecal trap to ensure safe handling and hygienic disposal of excess stool
- Dimensions similar to standard blood tubes permit instrument compatibility
- Screw-tight cap mechanisms for secure closure
- Integrated dropper
- Top cap for transportation or storage

### Product specification

Sample collection mass	19 mg (95% CI, 18.4-20.0 mg)
Drop dispensing volume	37 µl (95% CI, 36.2-37.2 µl)
Maximum liquid capacity	4 ml
Centrifugation	4,000 x g

### BIOHIT FAEX® Sample System

REF	Product	Qty
602600	BIOHIT FAEX® Sample System	50 tube
602610	BIOHIT FAEX® Sample System	250 tubes

Also available as bulk delivery



# BIOHIT Monoclonal Antibodies

The original BIOHIT Monoclonal Antibodies (MAbs) are efficient tools for research in the area of cellular pathology, neurobiology and oncology as well as in research of human gastric biomarkers. BIOHIT MAbs are all produced in mice, and they have been purified after production. They are all highly specific to their antigens and are applicable in immunohistochemistry, immunoprecipitation, and Western blotting, as well as other applications. BIOHIT MAbs are excellent for research, and they can be used as raw materials in the IVD industry. The antibodies are manufactured under ISO 13485.

## Efficient tools for research in the area of cellular pathology, neurology and oncology

**Pepsinogen I** - Pepsinogen I is a precursor to pepsin, produced by chief and mucous neck cells in the gastric corpus. In atrophic corpus gastritis, these cells are lost, leading to lower serum pepsinogen I levels and fewer positive cells in biopsies. Immunostaining for pepsinogen I reliably indicates functioning acid-secreting oxyntic glands. It is also positive in gastric heterotopia of the duodenal bulb, but not in gastric metaplasia.

**Pepsinogen II** - Pepsinogen II is a pepsin precursor secreted by pyloric glands in the antrum and by chief and neck cells in the corpus. A positive for pepsinogen II but negative stain for pepsinogen I indicates antral mucosa. In atrophic gastritis, this pattern suggests pseudopyloric metaplasia—metaplastic glands with pyloric differentiation.

**ECM Components** - The extracellular matrix (ECM), including connective tissue and basement membrane, supports cells and regulates key functions like proliferation, adhesion, migration, and healing. ECM components are valuable markers for tracking malignancy, invasion, and metastasis. BIOHIT offers monoclonal antibodies against fibronectin, tenascin, laminin, and vitronectin.

**Human Integrins-  $\beta$ 1- Integrin** - Integrins are glycoprotein receptors that mediate cell-ECM and cell-cell interactions and are involved in inflammation and cancer progression (adhesion and tissue remodeling). They consist of protein subfamilies with a common  $\beta$ -subunit and distinct  $\alpha$ -subunits. BIOHIT provides monoclonal antibodies to  $\beta$ 1-,  $\beta$ 3-, and all  $\beta$  integrins.

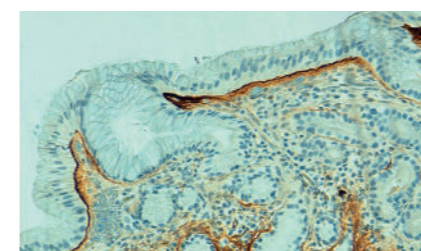
**Human Cytoskeletal Polypeptides** - The cytoskeleton controls cell shape, organization, and adhesion. Intermediate filaments help researching axonal damage and neuroinflammation, monitoring progression of neurodegenerative disease, and identifying tumor origins. BIOHIT offers antibodies to cytoskeletal proteins including  $\alpha$ -actinin,  $\alpha$ -fodrin, vinculin, various cytokeratins (7, 8, 17, 18, 19), vimentin, and neurofilaments (70, 150, 200).

**Human Spectrins** - Erythroid spectrins and band 3 protein are specific markers for erythrocytes and their precursors. They are more reliable for identifying erythroid differentiation than Glycophorin A. Monoclonal antibodies to  $\alpha$ - and  $\beta$ -erythroid spectrins aid in diagnosing erythroid leukemias, neuronal injury, and apoptosis and necrosis.

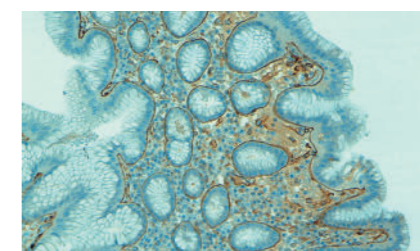
**Human Endothelial Cell Surface Marker- PECAM-1** - PECAM-1 is a cell adhesion molecule found on endothelial and certain hematopoietic cells. It is widely expressed on leukocytes and can be used in vascular research, immunology, and investigating tumor vasculature.

**Human Neurotransmitter Substances** - Neural and neuroendocrine cells produce neurotransmitters like GABA and CGRP, which can act as inhibitory or stimulatory signals and may be applied in research on epilepsy, anxiety, and neurodegenerative disorders.

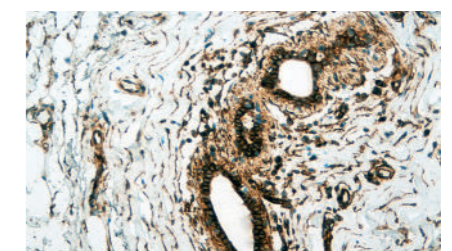
**Phytoestrogen- Genistein** - Genistein is an isoflavone acting as phytoestrogen and is found in soy and other legumes. It has been implicated in the prevention of cancer and chronic diseases. Detection of it in tissues and body fluids helps researchers study diet-disease relationships (e.g., breast or prostate cancer risk) and endocrine activity and disruption.



Tenascin-C



$\beta$ <sub>1</sub>-Integrin



$\alpha$ -Fodrin (normal breast)

# BIOHIT Monoclonal Antibodies Specifications

Specificity	Clone#	Host	Subclass	Format	Qty*	Applications**	Paraffin***	Ordering#
<b>Monoclonal Antibodies to Human Gastric Biomarkers</b>								
Gastrin-17	G52C7.1	mouse	IgG <sub>1</sub>	purified	100 µg	IHC, EIA	yes	610061
Gastrin-17	G55D4.1	mouse	IgG <sub>1</sub>	purified	100 µg	IHC, EIA	yes	610084
Pepsinogen I	4C6.1	mouse	IgG <sub>1</sub>	purified	100 µg	IHC	yes	610055
Pepsinogen II	L10CC10	mouse	IgG <sub>1</sub>	purified	100 µg	IHC	yes	610056
<b>Monoclonal Antibodies to Phytoestrogen</b>								
Genistein	L22FA2	mouse	IgG <sub>1</sub>	purified	100 µg	EIA, FIA	-	610058
<b>Monoclonal Antibodies to Human Extracellular Matrix Components</b>								
Cellular Fibronectin (cFn)	DH1	mouse	IgG <sub>1</sub>	purified	100 µg	IHC, WB, EIA	no	610001
Tenascin-C	EB2	mouse	IgG <sub>1</sub>	purified	100 µg	IHC, WB, EIA	no	610002
Tenascin-C	DB7	mouse	IgG <sub>2a</sub>	purified	100 µg	IHC, WB	yes	610003
Laminin (β <sub>1</sub> -chain)	DG10	mouse	IgG <sub>1</sub>	purified	100 µg	IHC, WB	no	610004
Laminin (γ <sub>1</sub> -chain)	BC7	mouse	IgG <sub>1</sub>	purified	100 µg	IHC, IP	no	610005
Plasma Fibronectin (pFn)	BF12	mouse	IgG <sub>1</sub>	purified	100 µg	IHC, WB	no	610006
Vitronectin	BE10	mouse	IgG <sub>1</sub>	purified	100 µg	IHC, WB	no	610007
<b>Monoclonal Antibodies to Human Integrins</b>								
β <sub>1</sub> -Integrin	DF5	mouse	IgG <sub>1</sub>	purified	100 µg	IHC, WB	yes	610008
β <sub>1</sub> -Integrin	DF7	mouse	IgG <sub>1</sub>	purified	100 µg	IHC, WB	yes	610009
β <sub>3</sub> -Integrin	BB10	mouse	IgG <sub>1</sub>	purified	100 µg	IHC, WB	no	610010
α <sub>IIb</sub> -Integrin	CA3	mouse	IgG <sub>1</sub>	purified	100 µg	IHC, WB	no	610011
<b>Monoclonal Antibodies to Human Endothelial Cell Surface marker</b>								
PECAM-1	CE6	mouse	IgG <sub>1</sub>	purified	100 µg	IHC, WB	no	610027
<b>Monoclonal Antibodies to Human Neurotransmitter Substances</b>								
GABA	5A9	mouse	IgG <sub>1</sub>	purified	100 µg	IHC, EIA	yes	610025
CGRP	CD8	mouse	IgG <sub>1</sub>	purified	100 µg	IHC, WB, EIA	yes	610026
<b>Monoclonal Antibodies to Human Cytoskeletal Polypeptides</b>								
α-Actinin	CB11	mouse	IgG <sub>1</sub>	purified	100 µg	IHC, WB	no	610012
α-Fodrin	AA6	mouse	IgG <sub>1</sub>	purified	100 µg	IHC, WB	no	610013
Vinculin	FB11	mouse	IgG <sub>1</sub>	purified	100 µg	IHC, WB	no	610014
Cytokeratin 18	4B11	mouse	IgG <sub>1</sub>	purified	100 µg	IHC, WB, IP	no	610015
Cytokeratin 8, 18, 19	2A4	mouse	IgG <sub>1</sub>	purified	100 µg	IHC, WB	no	610016
Cytokeratin 7, 17, 19	4F5	mouse	IgG <sub>1</sub>	purified	100 µg	IHC, WB	no	610017
Vimentin	65E	mouse	IgG <sub>1</sub>	purified	100 µg	IHC, WB	no	610018
Neurofilaments 150, 200	13AA	mouse	IgG <sub>1</sub>	purified	100 µg	IHC, WB	no	610021
Neurofilaments 70, 200	14BA	mouse	IgG <sub>1</sub>	purified	100 µg	IHC, WB	no	610022
<b>Monoclonal Antibodies to Human Spectrins</b>								
Erythroid α-Spectrin	AF10	mouse	IgG <sub>1</sub>	purified	100 µg	IP, WB, IHC	no	610023
Erythroid β-Spectrin	DB2	mouse	IgG <sub>1</sub>	purified	100 µg	IP, WB, IHC	no	610024

MAbs in other concentrations and in different buffer systems are available on request. \*Other sizes available on request, \*\*The BIOHIT monoclonal antibodies are applicable in: IHC = Immunohistochemistry, WB = Western Blotting, FIA = Time-resolved Fluorescence Immunoassay, IP = Immunoprecipitation, EIA = Enzyme Immunoassay, \*\*\* Reactivity with paraffin sections

# References

## GastroPanel®

- Agréus L, et al. 2012. Rationale in diagnosis and screening of atrophic gastritis with stomach specific plasma biomarkers. Scand J Gastroenterol. 47:136-147.
- Aine R, et al. 2016. Atrophic gastritis (AG) and its clinical sequels among elderly people in Finland and Estonia. A comparative study using GastroPanel and B12-vitamin testing of the residents in assisted-housing facilities. J Aging Res Clin Pract. 5:194-202.
- Benberin V, et al. 2013. Prevalence of *H. pylori* Infection and Atrophic Gastritis Among Symptomatic and Dyspeptic Adults in Kazakhstan. A Hospital based Screening Study Using a Panel of Serum Biomarkers. Anticancer Research. 33:4595-4602.
- Chhabra, M, et al. 2025. Point-of-Care Diagnosis of Atrophic Gastritis by Serological Biomarker Test (GastroPanel® Quick Test) in Gastroscopy Referral Patients in India. J. Clin. Med. 14:787.
- Germana B., et al. 2005. Clinical usefulness of serum pepsinogens I and II, gastrin-17 and anti-*Helicobacter pylori* antibodies in the management of dyspeptic patients in primary care. Dig Liver Dis. 37:501-508.
- Koivurova O-P, et al. 2021. Serological Biomarker Panel in Diagnosis of Atrophic Gastritis and *Helicobacter pylori* Infection in Gastroscopy Referral Patients: Clinical Validation of the New-Generation GastroPanel® Test. Anticancer Research. 41:5527-5537.
- Papadia C, et al. 2025. Can GastroPanel be used as a triage tool to select patients with advanced atrophic gastritis for gastroscopy? A prospective clinical validation study. BMJ Open Gastroenterol. 12:e001559.
- Sipponen P, Graham DY. 2007. Importance of atrophic gastritis in diagnostics and prevention of gastric cancer: application of plasma biomarkers. Scand. J. Gastroenterol. 42(1):2-10.
- Sipponen P, Härkönen M. 2010. Hypochlorhydric stomach: a risk condition for calcium malabsorption and osteoporosis? Scand Gastroenterol. 45:133-138.
- Storskrubb T, et al. 2008. Serum biomarkers provide an accurate method for diagnosis of atrophic gastritis in a general population: The Kalixanda study. Scand J Gastroenterol. 43:1448-1455.
- Syrjänen 2022. Accuracy of Serum Biomarker Panel (GastroPanel®) in the Diagnosis of Atrophic Gastritis of the Corpus. Systematic Review and Meta-analysis. Anticancer Research 42:1679-1696.
- Syrjänen K. 2017. Role of serological biomarker testing (GastroPanel®) in diagnosis of symptomatic dyspepsia and in screening of the risks of stomach cancer. EC Gastroenterol Digest Syst. 1(6):209-222.
- Telarañta-Keerie A, et al. 2010. Prevalence of undiagnosed advanced atrophic corpus gastritis in Finland: an observational study among 4256 volunteers without specific complaints. Scand J Gastroenterol. 45:1036-104.
- Väänänen H, et al. 2003. Non-Endoscopic Diagnosis of Atrophic Gastritis with a Blood Test. Correlation between Gastric Histology and Serum Levels of Gastrin-17 and Pepsinogen I. A Multicentre Study. Eur J Gastroenterol Hepatol. 15:885-891.
- Varis K, et al. 2000. Implications of Serum Pepsinogen I in Early Endoscopic Diagnosis of Gastric Cancer and Dysplasia. Scan J Gastroenterol. 35:950-956.
- Vohlonen I, et al. 2016. Risk of gastric cancer in *Helicobacter pylori* infection in a 15-year follow-up. Scand J Gastroenterol. 51:10, 1159-1164.
- Xiang L, 2025. Evaluation of Pepsinogen I, II, Gastrin 17 and *Helicobacter pylori* IgG in Atrophic Gastritis: A Head-To-Head Comparison of Lateral Flow and Enzyme-Linked Immunosorbent Assays. Helicobacter. 30:e70066.

## ColonView® quick test

- Bray F, et al. 2024. Global cancer statistics 2022:GLOBOCAN estimates of incidence and mortality worldwide for 36 cancers in 185 countries. CA: a cancer journal for clinicians, 74(3):229-263.
- Davidson KW, et al. 2021. Screening for colorectal cancer: US Preventive Services Task Force recommendation statement. Jama. 325(19):1965-1977.
- Guimaraes DP, et al. 2019. Comparison of a New-generation Fecal Immunochemical Test (FIT) With Guaiac Fecal Occult Blood Test (gFOBT) in Detecting Colorectal Neoplasia Among Colonoscopy-referral Patients. Anticancer Res. 39(1):261-269.
- Lüthgens K, et al. 1998. Hemoglobin-haptoglobin-complex: a highly sensitive assay for the detection of fecal occult blood. Clinical laboratory. 44(7-8), 543-551.
- Säftoiu A, et al. 2020. Role of gastrointestinal endoscopy in the screening of digestive tract cancer in Europe: European Society of Gastrointestinal Endoscopy (ESGE) Position Statement. Endoscopy. 52(04):293-304.
- Sieg A, et al. 1999. Detection of colorectal neoplasms by the highly sensitive hemoglobin-haptoglobin complex in feces. International journal of colorectal disease. 14(6):267-271.
- Vasilyev S, et al. 2015. A New-Generation Fecal Immunochemical Test (FIT) is Superior to Quaiac-based Test in Detecting Colorectal Neoplasia among Colonoscopy Referral Patients. Anticancer Res. 35(5):2873-2880.

## Lactose Intolerance quick test

- Furnari M. 2013. A comparison between lactose breath test and quick test on duodenal biopsies for diagnosing lactase deficiency in patients with self-reported lactose intolerance. J Clin Gastroenterol. 47(2):148-52.
- Ghanghro I, et al. 2009. The Incidence of Lactose Deficiency in an endoscopically and histologically normal group of white Caucasians. Gastroenterology Today. 19(3):76-78.
- Kuokkanen M, et al. 2006. A biopsy-based quick test in the diagnosis of duodenal hypolactasia in upper gastrointestinal endoscopy. Endoscopy. 38(7):708-712.
- Ojetti V, et al. 2008. Quick test: a new test for the diagnosis of duodenal hypolactasia. Dig Dis Sci. 53(6):1589-92
- Oriandi M, et al. 2006. IDENTIFYING LACTOSE INTOLERANCE WITH A NOVEL BIOPSY-BASED RAPID LACTASE TEST. Gut. Vol 55 (suppl V): A98

## BIOHIT *Helicobacter pylori* UFT300

- Vaira D, et al. 2010. A comparison amongst three rapid urease tests to diagnose *Helicobacter pylori* infection in 375 consecutive dyspeptic. Intern Emerg Med. 5:41-47
- Vaira D, et al. 2010. Accuracy of a new ultrafast rapid urease test to diagnose *Helicobacter pylori* infection in 1000 consecutive dyspeptic patients. Aliment Pharmacol Ther. 31:331-338

## *Helicobacter pylori* quick test

- Koumi A, et al. 2011. Detection of *Helicobacter pylori*: A faster urease test can save resources. World J Gastroenterol. 17(3):349-53.
- McNicholl AG, et al. 2010. Accuracy of Ultra-Rapid Urease Test for the diagnosis of *H. pylori* infection. Helicobacter. 15(4):360.
- O'Connor JPA, et al. 2011. Evaluation of a new rapid urease test for Point-of-Care diagnosis of *Helicobacter pylori* Infection. Irish Society of Gastroenterology Congress 2011. Poster presentation.
- Zullo A, et al. 2010 Rapid urease test for *H. pylori* diagnosis: pros and cons. Intern Emerg Med. 5:257-258.

## BIOHIT Celiac quick test

- Drago S, et al. 2002. Recent developments in the pathogenesis, diagnosis and treatment of celiac disease. *Expert Opin Ther Pat.* 12(1):45-51.
- Ferre-López S, et al. 2004. Immunochromatographic Sticks for Tissue Transglutaminase and Antigliadin Antibody Screening in Celiac Disease. *Clin Gastroenterol Hepatol.* 2:480-484.
- George DA, et al. 2013. The role of near-patient coeliac serology testing in the follow-up of patients with coeliac disease. *Frontline Gastroenterol.* 5(1):20-25.
- Hansson T, et al. 2002. Recombinant human tissue transglutaminase for diagnosis and follow-up of childhood coeliac disease". *Pediatr Res.* 51(6):700-705.
- Jennings J, et al. 2003. New developments in celiac disease. *Curr Opin Gastroenterol.* 19(2):118-129.
- Sárdy M, et al. 1999. Recombinant human tissue transglutaminase ELISA for the diagnosis of gluten-sensitive enteropathy. *Clin Chem.* 45(12):2142-2149.
- Sorell L, et al. 2002. One-step immunochromatographic assay for screening of celiac disease. *Lancet.* 359:945-946.
- Zhang J, et al. 1998. Modulation of the in situ activity of tissue transglutaminase by calcium and GTP. *J Biol Chem.* 273(4):2288-2295.

## Gluten immunogenic peptide (GIP)

- Comino I, et al. 2016. Fecal Gluten Peptides Reveal Limitations of Serological Tests and Food Questionnaires for Monitoring. *Gluten-Free Diet in Celiac Disease Patients.* *Am J Gastroenterol.* 111(10):1456-1465.
- Moreno M, et al. 2017. Detection of gluten immunogenic peptides in the urine of patients with coeliac disease reveals transgressions in the gluten-free diet and incomplete mucosal healing. *Gut.* 66(2):250-257.
- Ludvigsson J, et al. 2018. Outcome measures in coeliac disease trials: the Tampere recommendations. *Gut.* 67(8):1410-1424.
- Ruiz-Carnicer A, et al. 2020. Negative predictive value of the repeated absence of gluten immunogenic peptides in the urine of treated celiac patients in predicting mucosal healing: new proposals for follow-up in celiac disease. *Am J Clin Nutr.* 112(5):1240-1251.

## BIOHIT Calprotectin

- Tibble J, et al. 2000. A simple method for assessing intestinal inflammation in Crohn's disease. *Gut.* 47:506-513.
- Tibble J, et al. 2002. Use of surrogate markers of inflammation and Rome criteria to distinguish organic from nonorganic intestinal disease. *Gastroenterol.* 123:450-460.
- Tibble J, et al. 2001. Faecal calprotectin and faecal occult blood tests in the diagnosis of colorectal carcinoma and adenoma. *Gut.* 49:402-408.
- Tibble JA, Bjarnason I. 2001. Non-invasive investigation of inflammatory bowel disease. *World J Gastroenterol.* 7:460-465.
- Tibble JA, et al. 2000. Surrogate markers of intestinal inflammation are predictive of relapse in patients with quiescent inflammatory bowel disease. *Gastroenterol.* 119:15-22.
- Tøn H. 2000. Improved assay for fecal calprotectin. *Clinica Chimica Acta.* 292:41-54

## BIOHIT Active B12 (HoloTC)

- Nexo E, et al. 2002. Holo-transcobalamin is an early marker of changes in cobalamin homeostasis. A randomized placebo controlled study. *Clin Chem.* 48(10):1768-71
- Valente E, et al. 2011. Diagnostic accuracy of holotranscobalamin, methylmalonic acid, serum cobalamin, and other indicators of tissue vitamin B12 status in the elderly. *Clin Chem.* 57(6):856-863
- Nexo E. 2011. Hoffmann-Lucke E. Holotranscobalamin, a marker of vitamin B12 status: analytical aspects and clinical utility. *Am J Clin Nutr.* 94(1):359S-365S
- Obeid R, Jouma M, Hermann W. 2002. Cobalamin status (holotranscobalamin, methylmalonic acid) and folate as determinants of homocysteine concentration. *Clin Chem.* 48(11):2064-5
- Lloyd-Wright Z, et al. 2003. Holotranscobalamin as an indicator of dietary vitamin B12 deficiency. *Clin Chem.* 49(12):2076-8.
- Refsum H, Smith AD. 2003. Low Vitamin B12 status in confirmed Alzheimer's disease as revealed by serum holotranscobalamin. *J Neurol Neurosurg Psychiatry.* 74:959-61
- Chen X, et al. 2005. Influence of cobalamin deficiency compared with that of cobalamin absorption on serum holo-transcobalamin II. *Am J Clin Nutr.* 81:110-14

## Acetaldehyde binding products

- Linderborg K, et al. 2010. Reducing Carcinogenic Acetaldehyde Exposure in the Achlorhydric Stomach With Cysteine. *Alcohol Clin Exp Res.* 35(3):516-522.
- Linderborg K, et al. 2011. A single sip of a strong alcoholic beverage causes exposure to carcinogenic concentrations of acetaldehyde in the oral cavity. *Food Chem Toxicol.* 49(9):2103-6.
- Maejima R, et al. 2015. Effects of ALDH2 genotype, PPI treatment and L-cysteine on carcinogenic acetaldehyde in gastric juice and saliva after intragastric alcohol administration. *10(4):e0120397.*
- Salaspuro M. 2009. Acetaldehyde as a common denominator and cumulative carcinogen in digestive tract cancers. *Scand J Gastroenterol.* 44(8):912-25.
- Salaspuro M. 2012. Interactions of alcohol and tobacco in gastrointestinal cancer. *J Gastroenterol Hepatol.* 27 (Suppl 2):135 -139.
- Salaspuro V, Salaspuro M. 2004. Synergistic effect of alcohol drinking and smoking on in vivo acetaldehyde concentration in saliva. *Int J Cancer.* 111:480-483.
- Syrjänen K, et al. 2017. Slow-release L-cysteine (Acetium) lozenge is an effective new method in smoking cessation. A randomized, double blind placebo-controlled intervention. *Anticancer Res.* 37:3639-3648.

# Products

We specialize in digestive disease diagnostics, offering a portfolio of unique and patented tests designed to transform clinical practice by making screening, diagnosis and monitoring of gastrointestinal diseases more efficient and cost effective.

	Product	Lab	Clinic	Endoscopy	Consumer
Stomach	GastroPanel® Unified (plasma)	●			
	GastroPanel® Pepsinogen I (PGI) (plasma)	●			
	GastroPanel® Pepsinogen II (PGII) (plasma)	●			
	GastroPanel® <i>Helicobacter pylori</i> (plasma)	●			
	GastroPanel® Gastrin-17 (G-17) (plasma)	●			
	GastroPanel® quick test NT (whole blood, plasma)	●	●	●	
	<i>Helicobacter pylori</i> quick test (biopsy)			●	
	BIOHIT <i>Helicobacter pylori</i> UFT300 (biopsy)			●	
Intestine	BIOHIT ColonView® (FIT) quick test (stool)	●			
	Lactose Intolerance quick test (biopsy)			●	
	BIOHIT Celiac quick test (whole blood, serum, plasma)	●	●		
	Gluten Immunogenic peptide (GIP) test (stool, urine)	●	●		
	GlutenDetect test (stool, urine)				●
	BIOHIT Calprotectin (stool)	●			
	BIOHIT Active B12 (HoloTC) (serum)	●			
BIOHIT Total 25OH Vitamin D (serum, plasma)	●				
Acetaldehyde	Acetium® lozenge				●
	Acetium® capsule				●
Consumables	BIOHIT FAEX® Sample System	●	●		



See all Biohit solutions – visit our site [www.biohithealthcare.com](http://www.biohithealthcare.com) now!

# BIOHIT

Innovating for Health

## Biohit Oyj

Laippatie 1, FI-00880 Helsinki, Finland  
Tel. +358 9 773 861  
info@biohit.fi



Contact our team or visit our site  
[www.biohithealthcare.com](http://www.biohithealthcare.com)