Rat & Human acylated Ghrelin EIA Kit, Product Flyer

Interest in any of the products, request or order them at Bio-Connect Diagnostics.
Rat & Human acylated Ghrelin
EIA kit
(A05106 – A05117)

Bertin Pharma (formerly known as SPI-Bio) is a European leader in bioanalytical tools for application fields such as inflammation, growth hormone, nitric oxide, apoptosis, allergy and much more...

Our success key relies on the technology mastering of the AChE enzyme marker. This technique is used in the different formats of SPI-Bio® and CAYMAN CHEMICAL EIA's. Indeed, Bertin Pharma markets under its own trade mark SPI-Bio® but also for CAYMAN CHEMICAL, IBA, @rtMolecule and BIOSENSE.

Bertin Pharma has a pool of scientists ready to assist you either to develop customs assay or to readily provide you with the appropriate and accurate information.

Due to our distribution platform, we are able to expedite most of orders within 48 hours with express carrier so that the goods remain at temperature for their stability (dry ice).

Bertin Pharma is also a drug development services company divided into 2 areas of expertise, preclinical & clinical supplies and pharmaceutical development & clinical supplies.

Bertin Pharma is your Partner in Innovative Drug Development

• Specific for active (Octanoylated) form
• Versatile, can be used as sensitive or rapid
• Robust and simple EIA kit

Ghrelin

A new and promising Peptidyl hormone.

Ghrelin discovered in 1999, is fast becoming an endocrinology target of the millennium. Ghrelin, identified in rat stomach as an endogenous ligand for the GH secretagogue receptor, is mainly produced in stomach, but has been demonstrated in many other organs.

In addition to GH-releasing properties and its orexant action, ghrelin could act as an hormone having effects on gastric motility (similarity with the peptide hormone motilin), acidic secretion, cardiovascular action, antiproliferative effects, pancreatic and glucose metabolism function, sleep...

Ghrelin gene raises to mRNA prepro-ghrelin of 117 amino acids. This precursor is processed into ghrelin, 28 amino acids (human). Before being secreted, this peptide is octanoylated at Ser 3. This step is essential for biological activity.

If the endogenous peptide appears directly related to feeding behavior, the potential therapeutic importance of this hormone is not restricted to a regulator of food intake but also may be involved in osteoporosis somatopaus, infertility and ovulation induction, and some cardiovascular diseases.

Focus on our EIA kits

This Enzyme Immunometric Assay (EIA) is based on a double-antibody sandwich technique. The wells of the plate supplied with the kit are coated with a monoclonal antibody specific to the C-terminal part of ghrelin. This antibody will bind to any ghrelin introduced into the wells (standard or sample). The acetylcholinesterase (AChE) - Fab' conjugate which recognises the N-terminal part of acylated ghrelin is also added to the wells. This allows the two antibodies to form a sandwich by binding on different parts of the human acylated ghrelin.

The sandwich is immobilised on the plate so the excess reagents may be washed away. The concentration of the human acylated ghrelin is then determined by measuring the enzymatic activity of the immobilized AChE using the Ellman's Reagent. The AChE tracer acts on the Ellman's Reagent to form a yellow compound.

The intensity of the colour, which is determined by spectrophotometry, is proportional to the amount of the human acylated ghrelin present in the well during the immunological incubation.

You will find overleaf a synthesis of our EIA kit. Do not hesitate to contact us for any question that may arise.
**Rat & Human acylated ghrelin EIA kits**

Other species than rat and human not tested

**Media Application:** Plasma

**Preanalytical phase:** Collected on P-Hydroxymercuribenzoïcs acid. Direct analyses (without extraction) require 5-fold dilution

| Stability  | 18 months |
| Sample volume | 20 µL per well |
| Storage | -20° C |
| Shipping | dry ice |
| Size | 96 wells |
| Standard curve range | 0.08-10 pg/mL |

**EIA kit**  
**# cat n°**  
**Specificity**  
**Limit of detection**  
**Limit of quantification**  

<table>
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| Rat acylated Ghrelin (#A05117) | Rat 100%  
Human 82% | 0.7 pg/mL  
0.2 pg/mL | 2.0 pg/mL  
2.0 pg/mL |
| Human acylated Ghrelin (#A05106) | Human 100%  
Rat 118% | 0.8 pg/mL  
0.3 pg/mL | 2.0 pg/mL  
2.0 pg/mL |

**References**

- Grassi J. & Pradelles Ph.  
Compounds labelled by the acetylcholinesterase of Electrophorus Electricus. Its preparation process and its use as a tracer or marker in enzymo-immunological determinations.  

- Binn M., Albert C., Gougeon A., Maerki H., Coulie B., Lemoyne M., Rabasa Lhoret R., Tomasetto C., Poitras P.  
Ghrelin: a striking example of neuroendocrine peptide pleiotropy.  

- Bluet-Pajot MT., Tolle V., Zizzari P., Tomasetto C., Grouselle D., Epeibaum J.  
The Role of the small bowel in the regulation of circulating Ghrelin levels and food intake in the obese Zucker rat.  
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Ghrelin gastrokinetic action in patients with neurogenic gastroparesis.  

- Francesco Rubino, Philippe Zizzari, Catherine Tomasetto, Marie-Therese Bluet-Pajot, Antonello Forgione  
The Role of the small bowel in the regulation of circulating Ghrelin levels and food intake in the obese Zucker rat.  
*Endocrinology* 146(4):1745–1751, 2005

- Hiroshi Hosoda, Masayasu Kojima, Hiayuki Matsuo, and Kenji Kangawa1  
*Biochemical and Biophysical Research Communications 279, 909–913 (2000)*

**Related products**

**DIABETE/OBESITY**

- Rat Resistin EIA  
cat# A05179
- Human unacylated Ghrelin EIA  
cat# A05119
- Rat unacylated Ghrelin EIA  
cat# A05118
- Mouse Adiponectin EIA  
cat# A05187
- Human Leptin receptor EIA  
cat# A05175
- Mouse / Rat Leptin EIA  
cat# A05176
- Human Resistin EIA  
cat# A05177
- Human Resistin EIA  
cat# A05178
- Mouse Resistin EIA  
cat# A05179
- Human Adiponectin ELISA  
cat# A05185
- Human Adiponectin EIA  
cat# A05186
- Mouse / Rat insulin EIA  
cat# A05105
- Rat growth hormone EIA  
cat# A05104
- Rat albumin EIA  
cat# A05102
- Human AFABP EIA  
cat# A05181

**GASTRIC CYTOPROTECTION**

- PGE2 kits  
cat# 514010, 500141, 500501, 10004517

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Your Partner in Innovative Drug Development  
PROD/05/V04