

Human NRG1 beta 1 ELISA Kit ab100614

6 References 1 图像

概述

产品名称	人NRG1 beta 1 ELISA试剂盒
检测方法	Colorimetric
样品类型	Cell culture supernatant, Plasma
检测类型	Sandwich (quantitative)
灵敏度	< 50 pg/ml
范围	82.3 pg/ml - 20000 pg/ml
回收率	99 %

特定样本回收率

样品类型	平均 %	范围
Cell culture supernatant	114.9	102% - 123%
Plasma	86.02	79% - 94%

实验步骤 Multiple steps standard assay

种属反应性 与反应: Human

产品概述 Abcam's Human NRG1 beta 1 ELISA (Enzyme-Linked Immunosorbent Assay) kit is an *in vitro* enzyme-linked immunosorbent assay for the quantitative measurement of Human NRG1 beta 1 in plasma, and cell culture supernatants. (Collect plasma using EDTA or citrate as an anticoagulant. Heparinized plasma is not recommended. Human NRG1 beta 1 concentration is pretty low in normal plasma, it may not be detected in this assay).

This assay employs an antibody specific for Human NRG1 beta 1 coated on a 96-well plate. Standards and samples are pipetted into the wells and NRG1 beta 1 present in a sample is bound to the wells by the immobilized antibody. The wells are washed and biotinylated anti-Human antibody is added. After washing away unbound biotinylated antibody, HRP-conjugated streptavidin is pipetted to the wells. The wells are again washed, a TMB substrate solution is added to the wells and color develops in proportion to the amount of NRG1 beta 1 bound. The Stop Solution changes the color from blue to yellow, and the intensity of the color is measured at 450 nm.

We have not been able to detect endogenous Human NRG1 beta 1 in normal serum with

ab100614, only in serum spiked with Human NRG1 beta 1.

The ab100614 kit recognises the human HRG beta 1 protein (isoform 6) and has not been tested with other isoforms.

说明 Optimization may be required with urine samples

平台 Microplate

性能

存放说明 Store at -20°C. Please refer to protocols.

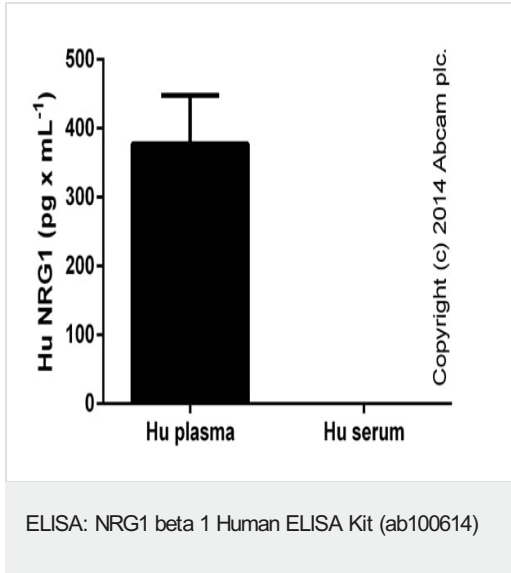
组件	1 x 96 tests
20X Wash Buffer	1 x 25ml
5X Assay Diluent B	1 x 15ml
500X HRP-Streptavidin Concentrate	1 x 200µl
Assay Diluent A	1 x 30ml
Biotinylated anti-Human NRG1 beta 1	2 vials
NRG1 beta 1 Microplate (12 x 8 wells)	1 unit
Recombinant Human NRG1 beta 1 Standard (lyophilized)	2 vials
Stop Solution	1 x 8ml
TMB One-Step Substrate Reagent	1 x 12ml

功能 Direct ligand for ERBB3 and ERBB4 tyrosine kinase receptors. Concomitantly recruits ERBB1 and ERBB2 coreceptors, resulting in ligand-stimulated tyrosine phosphorylation and activation of the ERBB receptors. The multiple isoforms perform diverse functions such as inducing growth and differentiation of epithelial, glial, neuronal, and skeletal muscle cells; inducing expression of acetylcholine receptor in synaptic vesicles during the formation of the neuromuscular junction; stimulating lobuloalveolar budding and milk production in the mammary gland and inducing differentiation of mammary tumor cells; stimulating Schwann cell proliferation; implication in the development of the myocardium such as trabeculation of the developing heart. Isoform 10 may play a role in motor and sensory neuron development.

组织特异性 Type I isoforms are the predominant forms expressed in the endocardium. Isoform alpha is expressed in breast, ovary, testis, prostate, heart, skeletal muscle, lung, placenta liver, kidney, salivary gland, small intestine and brain, but not in uterus, stomach, pancreas, and spleen. Isoform 3 is the predominant form in mesenchymal cells and in non-neuronal organs, whereas isoform 6 is the major neuronal form. Isoform 8 is expressed in spinal cord and brain. Isoform 9 is the major form in skeletal muscle cells; in the nervous system it is expressed in spinal cord and brain. Also detected in adult heart, placenta, lung, liver, kidney, and pancreas. Isoform 10 is expressed in nervous system: spinal cord motor neurons, dorsal root ganglion neurons, and brain. Predominant isoform expressed in sensory and motor neurons. Not detected in adult heart, placenta, lung, liver, skeletal muscle, kidney, and pancreas. Not expressed in fetal lung, liver and kidney. Type IV

疾病相关	<p>isoforms are brain-specific.</p> <p>Note=A chromosomal aberration involving NRG1 produces gamma-heregulin. Translocation t(8;11) with ODZ4. The translocation fuses the 5'-end of ODZ4 to NRG1 (isoform 8). The product of this translocation was first thought to be an alternatively spliced isoform. Gamma-heregulin is a soluble activating ligand for the ERBB2-ERBB3 receptor complex and acts as an autocrine growth factor in a specific breast cancer cell line (MDA-MB-175). Not detected in breast carcinoma samples, including ductal, lobular, medullary, and mucinous histological types, neither in other breast cancer cell lines.</p>
序列相似性	<p>Belongs to the neuregulin family.</p> <p>Contains 1 EGF-like domain.</p> <p>Contains 1 Ig-like C2-type (immunoglobulin-like) domain.</p>
发展阶段	<p>Detectable at early embryonic ages. Isoform 10 is highly expressed in developing spinal motor neurons and in developing cranial nerve nuclei. Expression is maintained only in both adult motor neurons and dorsal root ganglion neurons. Type IV isoforms are expressed in fetal brain.</p>
结构域	<p>The cytoplasmic domain may be involved in the regulation of trafficking and proteolytic processing. Regulation of the proteolytic processing involves initial intracellular domain dimerization.</p> <p>ERBB receptor binding is elicited entirely by the EGF-like domain.</p>
翻译后修饰	<p>Proteolytic cleavage close to the plasma membrane on the external face leads to the release of the soluble growth factor form.</p> <p>N- and O-glycosylated. Extensive glycosylation precedes the proteolytic cleavage.</p>
细胞定位	<p>Secreted; Cell membrane. Does not seem to be active; Membrane. May possess an internal uncleaved signal sequence; Nucleus. May be nuclear and Secreted. Has a signal peptide.</p>

图片



NRG1 beta measured in human biological fluids; signals from serum and from rat and mouse samples were below level of detection (duplicates +/- SD).

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.cn/abpromise> or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors