

ARG81582 Human Growth hormone receptor ELISA Kit

Package: 96 wells
Store at: 4°C

Component

Cat. No.	Component Name	Package	Temp
ARG81582-001	Antibody-coated microplate	8 X 12 strips	4°C. Unused strips should be sealed tightly in the air-tight pouch.
ARG81582-002	Standard	2 X 10 ng/vial	4°C
ARG81582-003	Standard/Sample diluent	30 ml (Ready to use)	4°C
ARG81582-004	Antibody conjugate concentrate (100X)	1 vial (100 µl)	4°C
ARG81582-005	Antibody diluent buffer	12 ml (Ready to use)	4°C
ARG81582-006	HRP-Streptavidin concentrate (100X)	1 vial (100 µl)	4°C
ARG81582-007	HRP-Streptavidin diluent buffer	12 ml (Ready to use)	4°C
ARG81582-008	25X Wash buffer	20 ml	4°C
ARG81582-009	TMB substrate	10 ml (Ready to use)	4°C (Protect from light)
ARG81582-010	STOP solution	10 ml (Ready to use)	4°C
ARG81582-011	Plate sealer	4 strips	Room temperature

Summary

Product Description	ARG81582 Human Growth hormone receptor ELISA Kit is an Enzyme Immunoassay kit for the quantification of Human Growth hormone receptor in serum, plasma (heparin, EDTA) and cell culture supernatants.
Tested Reactivity	Hu
Tested Application	ELISA
Specificity	There is no detectable cross-reactivity with other relevant proteins.
Target Name	Growth hormone Receptor
Conjugation	HRP
Conjugation Note	Substrate: TMB and read at 450 nm.
Sensitivity	78 pg/ml
Sample Type	Serum, plasma (heparin, EDTA) and cell culture supernatants.
Standard Range	156 - 10000 pg/ml
Sample Volume	100 µl

Precision	Intra-Assay CV: 5.3% Inter-Assay CV: 5.9%
Alternate Names	GH-binding protein; Growth hormone receptor; GHBP; GHIP; Serum-binding protein; GH receptor; Somatotropin receptor

Application Instructions

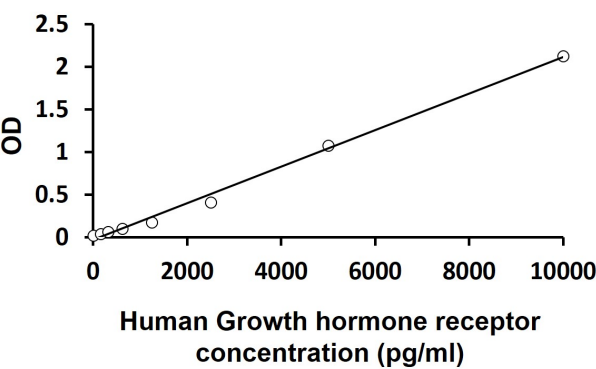
Assay Time	~ 5 hours
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Properties

Form	96 well
Storage instruction	Store the kit at 2-8°C. Keep microplate wells sealed in a dry bag with desiccants. Do not expose test reagents to heat, sun or strong light during storage and usage. Please refer to the product user manual for detail temperatures of the components.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	GHR
Gene Full Name	growth hormone receptor
Background	<p>This gene encodes a member of the type I cytokine receptor family, which is a transmembrane receptor for growth hormone. Binding of growth hormone to the receptor leads to receptor dimerization and the activation of an intra- and intercellular signal transduction pathway leading to growth. Mutations in this gene have been associated with Laron syndrome, also known as the growth hormone insensitivity syndrome (GHIS), a disorder characterized by short stature. In humans and rabbits, but not rodents, growth hormone binding protein (GHBP) is generated by proteolytic cleavage of the extracellular ligand-binding domain from the mature growth hormone receptor protein. Multiple alternatively spliced transcript variants have been found for this gene.[provided by RefSeq, Jun 2011]</p>
Function	<p>Receptor for pituitary gland growth hormone involved in regulating postnatal body growth. On ligand binding, couples to the JAK2/STAT5 pathway (By similarity).</p> <p>The soluble form (GHBP) acts as a reservoir of growth hormone in plasma and may be a modulator/inhibitor of GH signaling.</p> <p>Isoform 2 up-regulates the production of GHBP and acts as a negative inhibitor of GH signaling. [UniProt]</p>
Highlight	<p>Related products: Growth hormone Receptor antibodies; Growth hormone Receptor ELISA Kits; New ELISA data calculation tool: Simplify the ELISA analysis by GainData</p>
PTM	<p>The soluble form (GHBP) is produced by phorbol ester-promoted proteolytic cleavage at the cell surface (shedding) by ADAM17/TACE. Shedding is inhibited by growth hormone (GH) binding to the receptor probably due to a conformational change in GHR rendering the receptor inaccessible to ADAM17 (By similarity).</p> <p>On GH binding, phosphorylated on tyrosine residues in the cytoplasmic domain by JAK2.</p> <p>On ligand binding, ubiquitinated on lysine residues in the cytoplasmic domain. This ubiquitination is not sufficient for GHR internalization (By similarity). [UniProt]</p>



ARG81582 Human Growth hormone receptor ELISA Kit standard curve image

ARG81582 Human Growth hormone receptor ELISA Kit results of a typical standard run with optical density reading at 450 nm.