

Product datasheet

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ARG82043 Human Leptin Receptor ELISA Kit

Package: 96 wells Store at: 4°C

Summary

Product Description Human Leptin Receptor ELISA Kit is an Enzyme Immunoassay kit for the quantification of Human Leptin

Receptor in serum, plasma and cell culture supernatants.

Tested Reactivity Hu

Tested Application ELISA

Target Name Leptin Receptor

Conjugation HRP

Conjugation Note Substrate: TMB and read at 450 nm.

Sensitivity 156 pg/ml

Sample Type Serum, plasma and cell culture supernatants.

Standard Range 312 - 20000 pg/ml

Sample Volume $100 \ \mu l$

Alternate Names LEPRD; CD antigen CD295; CD295; Leptin receptor; LEP-R; HuB219; OB-R; OBR; OB receptor

Application Instructions

Assay Time 4.5 hours

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 LEPR

Gene Full Name leptin receptor

Background The protein encoded by this gene belongs to the gp130 family of cytokine receptors that are known to

stimulate gene transcription via activation of cytosolic STAT proteins. This protein is a receptor for leptin (an adipocyte-specific hormone that regulates body weight), and is involved in the regulation of fat metabolism, as well as in a novel hematopoietic pathway that is required for normal lymphopoiesis. Mutations in this gene have been associated with obesity and pituitary dysfunction. Alternatively spliced transcript variants encoding different isoforms have been described for this gene. It is noteworthy that this gene and LEPROT gene (GeneID:54741) share the same promoter and the first 2

exons, however, encode distinct proteins (PMID:9207021).[provided by RefSeq, Nov 2010]

Function Receptor for obesity factor (leptin). On ligand binding, mediates signaling through JAK2/STAT3. Involved

in the regulation of fat metabolism and, in a hematopoietic pathway, required for normal

lymphopoiesis. May play a role in reproduction. Can also mediate the ERK/FOS signaling pathway (By

similarity). [UniProt]

Highlight Related products:

<u>Leptin Receptor antibodies</u>; <u>Leptin Receptor ELISA Kits</u>;

New ELISA data calculation tool: Simplify the ELISA analysis by GainData

PTM On ligand binding, phosphorylated on two conserved C-terminal tyrosine residues (isoform B only) by

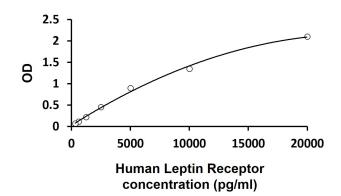
JAK2. Tyr-986 is required for complete binding and activation of PTPN11, ERK/FOS activation, for interaction with SOCS3 and SOCS3 mediated inhibition of leptin signaling. Phosphorylation on Tyr-1141 is required for STAT3 binding/activation. Phosphorylation of Tyr-1079 has a more accessory role.

[UniProt]

Cellular Localization Cell membrane; Single-pass type I membrane protein. Basolateral cell membrane. Isoform E: Secreted.

[UniProt]

Images



ARG82043 Human Leptin Receptor ELISA Kit standard curve image

ARG82043 Human Leptin Receptor ELISA Kit results of a typical standard run with optical density reading at 450 nm.