ARG82080
Mouse Leptin Receptor ELISA Kit

Package: 96 wells
Store at: 4°C

Component

Cat. No.	Component Name	Package	Temp
ARG82080-001	Antibody-coated microplate	8 X 12 strips	4°C. Unused strips should be sealed tightly in the air-tight pouch.
ARG82080-002	Standard	2 X 10 ng/vial	4°C
ARG82080-003	Standard/Sample diluent	30 ml (Ready to use)	4°C
ARG82080-004	Antibody conjugate concentrate (100X)	1 vial (100 µl)	4°C
ARG82080-005	Antibody diluent buffer	12 ml (Ready to use)	4°C
ARG82080-006	HRP-Streptavidin concentrate (100X)	1 vial (100 µl)	4°C
ARG82080-007	HRP-Streptavidin diluent buffer	12 ml (Ready to use)	4°C
ARG82080-008	25X Wash buffer	20 ml	4°C
ARG82080-009	TMB substrate	10 ml (Ready to use)	4°C (Protect from light)
ARG82080-010	STOP solution	10 ml (Ready to use)	4°C
ARG82080-011	Plate sealer	4 strips	Room temperature

Summary

Product Description	ARG82080 Mouse Leptin Receptor ELISA Kit is an Enzyme Immunoassay kit for the quantification of Mouse Leptin Receptor in serum, plasma (heparin, EDTA) and cell culture supernatants.
Tested Reactivity	Ms
Tested Application	ELISA
Specificity	There is no detectable cross-reactivity with other relevant proteins.
Target Name	Leptin 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

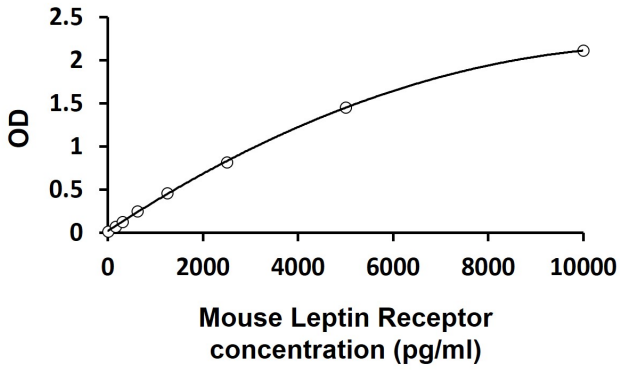|	
Precision	Intra-Assay CV: 6.7%; Inter-Assay CV: 7.8%
Alternate Names	LEPRD; CD antigen CD295; CD295; Leptin receptor; LEP-R; HuB219; OB-R; OBR; OB receptor

Application Instructions

Assay Time	~ 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: Leptin Receptor antibodies; Leptin Receptor ELISA Kits; 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

ARG82080 Mouse Leptin Receptor ELISA Kit standard curve image

ARG82080 Mouse Leptin Receptor ELISA Kit results of a typical standard run with optical density reading at 450 nm.