

Product datasheet

Recombinant Human Leptin Receptor protein ab245807

Description

Product name Recombinant Human Leptin Receptor protein

Purity > 98 % SDS-PAGE.
>98 % by HPLC.

Expression system CHO cells

Accession [P48357](#)

Protein length Protein fragment

Animal free No

Nature Recombinant

Species Human

Sequence

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FNLSYPITPWRFKLSCMPPNSTYDYFLLPAGLSKNTSNSN
GHYETAVEPK
FNSSGTHFSNLSKTTFHCCFRSEQDRNCSLCADNIEGKTF
VSTVNSLVFQ
QIDANWNIQCWLKGDCLKFICYVESLFKNLFRNYNYKVHLL
YVLPEVLED
SPLVPQKGSFQMVHCNCSVHECCECLVPVPTAKLNDTLL
MCLKITSGGVI
FQSPLMSVQPINMVKPDPLGLHMEITDDGNLKISWSSPP
LVPFPLQYQV
KYSENSTTVIREADKIVSATSLLVDSILPGSSYEVQVRGKRL
DGPGIWSD
WSTPRVFTTQDVMYFPPKILTSVGSNVSFHCYKKNKIVPS
KEIWWWMN
LAEKIPQSQYDVVSDHVSKVTFNINLNETKPRGKFTYDAVY
CCNEHECHHR
YAELYIDVNNINISCETDGYLTKMTCRWSTSTIQSLAESTLQ
LRYHRSSL
YCSDIPSIHPISEPKDCYLQSDGFYECIFQPIFLLSGYTMWIRI
NHSLGS
LDSPTCVLPDSVVKPLPPSSVKAETINIGLLKISWEKPVF
PENNLQFQ
IRYGLSGKEVQWKMYEVYDAKSKSVSLPVPDLCAVYAVQ
VRCKRLDGL
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GYWSNWSNPAYTVVMDIKVPMRGPEFWRIINGDTMKKEK
NVTLLWKPLMK
NDSLCSVQRYVINHHTSCNGTWSEEDVGNHTKFTFLWTEQ
AHTVTVLAINS
IGASVANFNLTFSWPMSKVIVQSL SAYPLNSSCVVSWIL
SPSDYKLMY
FII EWKLNLEDGEIKWLRISSSVKKYYIHDHFIPIEKYQFSLYP
IFMEGV GPKKIINSFTQDDIEKHQSD

Predicted molecular weight 94 kDa
Amino acids 22 to 839
Additional sequence information Extracellular domain.

Specifications

Our **Abpromise guarantee** covers the use of **ab245807** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications HPLC
SDS-PAGE

Form Lyophilized

Additional notes As a result of glycosylation, ab245807 migrates with an apparent molecular mass of approximately 130-150 kDa by SDS-PAGE gel, under reducing and non-reducing conditions.

Preparation and Storage

Stability and Storage Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
Constituent: 0.16% Sodium phosphate

Reconstitution Reconstitute in water to 1.0-5.0 mg/ml.

General Info

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.

Tissue specificity Isoform A is expressed in fetal liver and in hematopoietic tissues and choroid plexus. In adults highest expression in heart, liver, small intestine, prostate and ovary. Low level in lung and kidney. Isoform B is highly expressed in hypothalamus.

Sequence similarities Belongs to the type I cytokine receptor family. Type 2 subfamily.
Contains 4 fibronectin type-III domains.
Contains 1 Ig-like (immunoglobulin-like) domain.

Domain The cytoplasmic domain may be essential for intracellular signal transduction by activation of JAK tyrosine kinase and STATs.
The WSXWS motif appears to be necessary for proper protein folding and thereby efficient intracellular transport and cell-surface receptor binding.

	The box 1 motif is required for JAK interaction and/or activation.
Post-translational modifications	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 and, for interaction with SOCS3 (By similarity). Phosphorylation on Tyr-1141 is required for STAT3 binding/activation.
Cellular localization	Secreted and Cell membrane.

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