

Insulin Receptor Recombinant Protein | INSR recombinant protein

Recombinant Mouse Insulin Receptor Protein (ECD, His Tag), HPLC-verified

CATALOG # AAA259388	HOST HEK293 Cells	REACTIVITY Mouse
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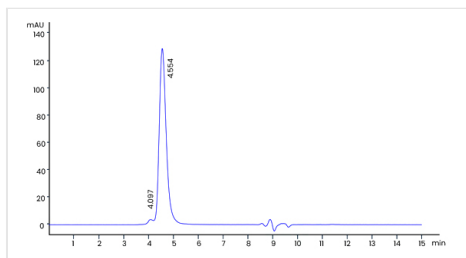
PRODUCT SYNONYMS

Insulin Receptor; Recombinant Mouse Insulin Receptor Protein (ECD; His Tag); HPLC-verified; Mouse Insulin Receptor Protein (ECD; insulin receptor; 4932439J01Rik Protein; Mouse; CD220 Protein; D630014A15Rik Protein; Insr Protein; IR Protein; IR-A Protein; IR-B Protein; INSR recombinant protein

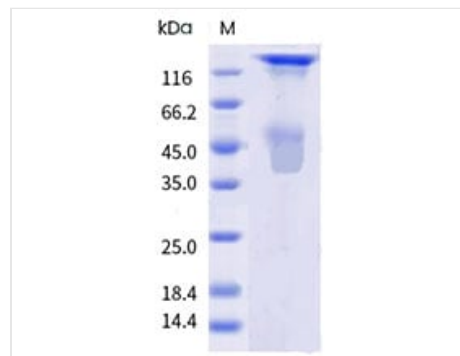
PRODUCT SPECIFICATIONS

Host	HEK293 Cells
Reactivity	Mouse
Purity/Purification	>= 95% as determined by SDS-PAGE. >= 95% as determined by SEC-HPLC.
Form/Format	Lyophilized from sterile PBS, pH 7.4. Normally 5%-8% trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization.
Sequence	Met1-Lys94 6
Tag	C-His
Predicted N Terminal	His 28
Endotoxin	< 1.0 EU perug of the protein as determined by the LAL method
Protein Construction	A DNA sequence encoding the Mouse INSR (NP_034698.2)(Met1-Lys946) was expressed with a polyhistidine tag at the C-terminus.
Preparation and Storage	Samples are stable for up to twelve months from date of receipt at -20 degree C to -80 degree C. Store it under sterile conditions at -20 degree C to -80 degree C. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles. In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

IMAGES



Application Data



Application Data

ADDITIONAL INFORMATION

Related Product Information for INSR recombinant protein	INSR (Insulin receptor), also known as CD220, is a transmembrane receptor that is activated by insulin. INSR belongs to the protein kinase superfamily and exists as a tetramer consisting of two alpha subunits and two beta subunits linked by disulfide bonds. The alpha and beta subunits are encoded by a single INSR gene, and the beta subunits pass through the cellular membrane. As the receptor for insulin with tyrosine-protein kinase activity, INSR associates with downstream mediators upon binding to insulin, including IRS1 (insulin receptor substrate 1) and phosphatidylinositol 3'-kinase (PI3K). IRS-1 binding and phosphorylation eventually lead to an increase in the high-affinity glucose transporter (Glut4) molecules on the outer membrane of insulin-responsive tissues. INSR isoform long and isoform short are expressed in the peripheral nerve, kidney, liver, striated muscle, fibroblasts and skin, and is found as a hybrid receptor with IGF1R which also binds IGF1 in muscle, heart, kidney, adipose tissue, skeletal muscle, hepatoma, fibroblasts, spleen, and placenta. Defects in Insulin Receptor/INSR are the cause of Rabson-Mendenhall syndrome (Mendenhall syndrome), insulin resistance (Ins resistance), leprechaunism (Donohue syndrome), and familial hyperinsulinemic hypoglycemia 5 (HHF5). It may also be associated with noninsulin-dependent diabetes mellitus (NIDDM).
Product Categories/Family for INSR recombinant protein	AMPK Signaling Pathway; Receptor Tyrosine Kinases (RTKs)
References	Ebin. Y.. e. al.,(1985). Th. huma. insuli. recepto. cDNA. th. structura. basi. fo. hormone-activate. transmembran. signalling. Cel. 40:747-758.Ullric. A.. e. al.. (1985). Huma. insuli. recepto. an. it. relationshi. t. th. tyrosin. kinas. famil. o. oncogenes.Natur. 313:756-761.Grimwoo. J.. e. al.,(2004). Th. DN. sequenc. an. biolog. o. huma. chromosom. 19.Natur. 428:529-535.

NCBI AND UNIPROT INFORMATION

NCBI GI #	157057178
NCBI GeneID	16337
NCBI Accession #	NP_034698.2
NCBI GenBank Nucleotide #	NM_010568.2
UniProt Accession #	P15208; F8VPU4
Molecular Weight	155,610 Da
NCBI Official Full Name	insulin receptor
NCBI Official Synonym Full Names	insulin receptor
NCBI Official Symbol	Insr
NCBI Official Synonym Symbols	IR; IR-A; IR-B; CD220; 4932439J01Rik; D630014A15Rik
NCBI Protein Information	insulin receptor
UniProt Protein Name	Insulin receptor
UniProt Gene Name	Insr
UniProt Synonym Gene Names	IR
UniProt Entry Name	INSR_MOUSE

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.