Datasheet for ABIN7317078

Insulin Receptor Protein (INSR) (GST tag,His tag)

1 Image

Go to Product page

Overview

Quantity:	50 µg
Target:	Insulin Receptor (INSR)
Origin:	Human
Source:	Baculovirus infected Insect Cells
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This Insulin Receptor protein is labelled with GST tag,His tag.

Product Details

Purpose:	Recombinant Human Insulin Receptor/INSR Protein (His & GST Tag)(Active)
Sequence:	Gly 989-Ser 1382
Characteristics:	A DNA sequence encoding the human INSR isoform long (NP_000199.2) cytoplasmic domain (Gly 989-Ser 1382) was fused with the N-terminal polyhistidine-tagged GST tag at the N-terminus.
Purity:	> 92 % as determined by reducing SDS-PAGE.
Endotoxin Level:	< 1.0 EU per µg as determined by the LAL method.
Biological Activity Comment:	The specific activity was determined to be 45 nmol/min/mg using Poly(Ala,Glu,Lys,Tyr)6:2:5:1 as substrate.

Target Details

Target:	Insulin Receptor (INSR)

Target Details

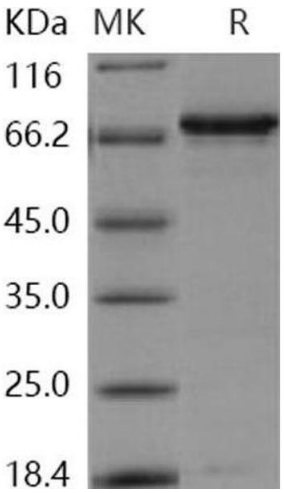
Alternative Name:	Insulin Receptor/INSR (INSR Products)
Background:	Background: INSR (Insulin receptor), also known as CD220, is a transmembrane receptor that is activated by insulin. INSR belongs to theprotein kinase superfamily, and exists as a tetramer consisting of two alpha subunits and two beta 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 leads 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, fibrobasts, 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). Synonym: CD220,HHF5,Insulin Receptor
Molecular Weight:	72.3 kDa
NCBI Accession:	NP_000199
Pathways:	NF-kappaB Signaling, RTK Signaling, AMPK Signaling, Carbohydrate Homeostasis, Regulation of Cell Size, Regulation of Carbohydrate Metabolic Process, Growth Factor Binding, Negative Regulation of Transporter Activity

Application Details

Restrictions:	For Research Use only

Handling

Format:	Frozen, Liquid
Buffer:	Supplied as sterile 50 mM Tris, 100 mM NaCl, pH 7.4, 20 % glycerol, 0.3 mM DTT
Storage:	-20 °C
Storage Comment:	Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.



Western Blotting

Image 1.