

Product Information

Recombinant Anti-Human insr Antibody Fab Fragment

Cat. No.: **MOM-18407-F(E)**

This product is for research use only and is not intended for diagnostic use.

Product Overview

Recombinant Mouse Antibody Fab Fragment is directed against Human INSR, expressed in Chinese Hamster Ovary cells(CHO)

Antigen Description

Insulin receptor mediates the biological activities of insulin by regulating multiple signaling pathways through activation of a series of phosphorylation cascades. The human insulin receptor is a heterotetrameric membrane glycoprotein consisting of disulfide-linked subunits in a $\alpha_2\beta_2$ configuration. The β -subunit (95kDa) possesses a single transmembrane domain with tyrosine kinase activity, whereas the α -subunit (135kDa) is completely extracellular. The alpha subunits each contain insulin binding sites and are entirely extracellular in localization. The beta subunits each possess an extracellular domain, a single transmembrane domain, and a cytoplasmic tyrosine kinase domain. Binding of insulin to the alpha subunits induces a conformation change in the receptor which activates the kinase domain, stimulating tyrosine autophosphorylation of the receptor and tyrosine phosphorylation of at least five different insulin receptor substrates designated IRS-1-4, and Shc.

Specific Activity

Tested positive against native antigen.

Target

INSR

Immunogen

Human placental insulin receptor.

Source

Mouse

Species Reactivity

Human

Type

Fab

Expression Host

CHO

Purity

Purity >95% by SDS-PAGE.

Applications

Suitable for use in FC, IP, ELISA, Neut, FuncS, IF and most other immunological methods.

Storage

Store at +4°C short term (1-2 weeks). Aliquot and store at -20°C long term. Avoid repeated freeze/thaw cycles.

ANTIGEN GENE INFORMATION

Gene Name

[INSR insulin receptor \[Homo sapiens \]](#)

Official Symbol

INSR

Synonyms

INSR; insulin receptor; CD220; IR; HHF5

Gene ID

[3643](#)

mRNA Refseq

[NM_000208](#)

Protein Refseq

[NP_000199](#)

MIM

[147670](#)

UniProt ID

P06213

Chromosome Location

19p13.3-p13.2

Pathway

Adherens junction, organism-specific biosystem; Adherens junction, conserved biosystem; Aldosterone-regulated sodium reabsorption, organism-specific biosystem; Aldosterone-regulated sodium reabsorption, conserved biosystem; IRS activation, organism-specific biosystem; IRS-mediated signalling, organism-specific biosystem; IRS-related events, organism-specific biosystem;

Function

3-phosphoinositide-dependent protein kinase binding; ATP binding; GTP binding; PTB domain binding; SH2 domain binding; insulin binding; insulin binding; insulin binding; insulin receptor substrate binding; insulin-activated receptor activity; insulin-like growth factor I binding; insulin-like growth factor II binding; insulin-like growth factor receptor binding; lipoic acid binding; nucleotide binding; phosphatidylinositol 3-kinase binding; protein binding; protein complex binding; protein domain specific binding; protein phosphatase binding; protein tyrosine kinase activity; protein tyrosine kinase activity; protein tyrosine kinase activity; receptor activity; receptor signaling protein tyrosine kinase activity;