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Product datasheet

Recombinant Human GRB10 protein ab152439

1 Image

Description

Product name Recombinant Human GRB10 protein

Expression system Wheat germ Accession Q13322-3

Protein length Full length protein

Animal free No

Nature Recombinant

Species Human

Sequence MNASLESLYSACSMQSDTVPLLQNGQHARSQPRASGPP

RSIQPQVSPRQR

VQRSQPVHILAVRRLQEEDQQFRTSSLPAIPNPFPELCGP

GSPPVLTPGS

LPPSQAAAKQDVKVFSEDGTSKVVEILADMTARDLCQLL

VYKSHCVDDNS

WTLVEHHPHLGLERCLEDHELVVQVESTMASESKFLFRK

NYAKYEFFKNP

MNFFPEQMVTWCQQSNGSQTQLLQNFLNSSSCPEIQGFL

HVKELGKKSWK

KLYVCLRRSGLYCSTKGTSKEPRHLQLLADLEDSNIFSLIA

GRKQYNAPT

DHGLCIKPNKVRNETKELRLLCAEDEQTRTCWMTAFRLLK

YGMLLYQNYR

IPQQRKALLSPFSTPVRSVSENSLVAMDFSGQTGRVIENP

AEAQSAALEE

GHAWRKRSTRMNILGSQSPLHPSTLSTVIHRTQHWFHGRI

SREESHRIIK

QQGLVDGLFLLRDSQSNPKAFVLTLCHHQKIKNFQILPCE

DDGQTFFSLD

DGNTKFSDLIQLVDFYQLNKGVLPCKLKHHCIRVAL

Predicted molecular weight 87 kDa including tags

Amino acids 1 to 536

Additional sequence information This recombinant protein is related to isoform 2 which lacks the first 58 amino acids of the

canonical isoform.

Specifications

Our Abpromise guarantee covers the use of ab152439 in the following tested applications.

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

Applications ELISA

SDS-PAGE

Western blot

Form Liquid

Additional notes

Preparation and Storage

Stability and Storage Shipped on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles.

pH: 8.00

Constituents: 0.31% Glutathione, 0.79% Tris HCI

General Info

Function Adapter protein which modulates coupling of a number of cell surface receptor kinases with

specific signaling pathways. Binds to, and suppress signals from, activated receptors tyrosine kinases, including the insulin (INSR) and insulin-like growth factor (IGF1R) receptors. The inhibitory effect can be achieved by 2 mechanisms: interference with the signaling pathway and increased receptor degradation. Delays and reduces AKT1 phosphorylation in response to insulin stimulation. Blocks association between INSR and IRS1 and IRS2 and prevents insulin-stimulated

IRS1 and IRS2 tyrosine phosphorylation. Recruits NEDD4 to IGF1R, leading to IGF1R

ubiquitination, increased internalization and degradation by both the proteasomal and lysosomal pathways. May play a role in mediating insulin-stimulated ubiquitination of INSR, leading to proteasomal degradation. Negatively regulates Wnt signaling by interacting with LRP6 intracellular portion and interfering with the binding of AXIN1 to LRP6. Positive regulator of the

KDR/VEGFR-2 signaling pathway. May inhibit NEDD4-mediated degradation of KDR/VEGFR-2.

Tissue specificity Widely expressed in fetal and adult tissues, including fetal and postnatal liver, lung, kidney,

skeletal muscle, heart, spleen, skin and brain.

Sequence similarities Belongs to the GRB7/10/14 family.

Contains 1 PH domain.

Contains 1 Ras-associating domain.

Contains 1 SH2 domain.

Domain The PH domain binds relatively non-specifically to several phosphoinositides, including PI(5)P,

PI(4,5)P2, PI(3,4)P2 and PI(3,4,5)P3, with modest affinities.

Post-translational

modifications

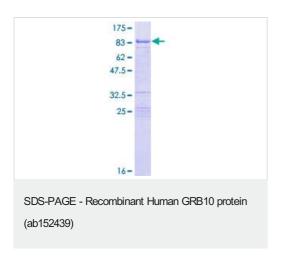
phosphorylated on serine residues upon EGF, FGF and PDGF stimulation.

Cytoplasm. When complexed with NEDD4 and IGF1R, follows IGF1R internalization, remaining

associated with early endosomes. Uncouples from IGF1R-containing endosomes before the

sorting of the receptor to the lysosomal compartment.

Images



12.5% SDS-PAGE analysis of ab152439 stained with Coomassie Blue.

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