

Datasheet for ABIN7320325 MEK1 Protein (GST tag,His tag)

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1 Image

Overview

Quantity:	50 µg
Target:	MEK1 (MAP2K1)
Origin:	Mouse
Source:	Baculovirus infected Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This MEK1 protein is labelled with GST tag,His tag.

Product Details

Purpose:	Recombinant Mouse MEK1/MAP2K1/MKK1 Protein (His & GST Tag)
Sequence:	Met 1-Ile 393
Characteristics:	A DNA sequence encoding the mouse MAP2K1 (P31938) (Met 1-Ile 393) was fused with the N-terminal polyhistidine-tagged GST tag at the N-terminus.
Purity:	> 95 % as determined by SDS-PAGE
Endotoxin Level:	< 1.0 EU per µg of the protein as determined by the LAL method.

Target Details

Target:	MEK1 (MAP2K1)
Alternative Name:	MEK1/MAP2K1/MKK1 (MAP2K1 Products)
Background:	Background: MEK1, also known as MAP2K1 and MKK1, is a member of the dual specificity protein kinase family, which acts as a mitogen-activated protein (MAP) kinase kinase. MAP kinases, also known as extracellular signal-regulated kinases (ERKs), act as an integration point

Target Details

for multiple biochemical signals. MEK1 is widely expressed, with extremely low levels in brain. It lies upstream of MAP kinases and stimulates the enzymatic activity of MAP kinases upon wide variety of extra- and intracellular signals. As an essential component of MAP kinase signal transduction pathway, MEK1 is involved in many cellular processes such as proliferation, differentiation, transcription regulation and development. Binding extracellular ligands such as growth factors, cytokines and hormones to their cell-surface receptors activates RAS and this initiates RAF1 activation. RAF1 then further activates the dual-specificity protein kinases MAP2K1 and MEK2. MEK1 has been shown to export PPARG from the nucleus. The MAPK cascade is also involved in the regulation of endosomal dynamics, including lysosome processing and endosome cycling through the perinuclear recycling compartment (PNRC), as well as in the fragmentation of the Golgi apparatus during mitosis. MKK1 catalyzes the concomitant phosphorylation of a threonine and a tyrosine residue in a Thr-Glu-Tyr sequence located in MAP kinases. Defects in MEK1 can cause cardiofaciocutaneous syndrome. Immune Checkpoint Immunotherapy Cancer Immunotherapy Targeted Therapy

Synonym: MAPKK1;Mek1;MEKK1;Prkmk1

Molecular Weight: 71.3 kDa

UniProt: [P31938](#)

Pathways: [MAPK Signaling](#), [RTK Signaling](#), [Interferon-gamma Pathway](#), [Fc-epsilon Receptor Signaling Pathway](#), [Neurotrophin Signaling Pathway](#), [Activation of Innate immune Response](#), [Toll-Like Receptors Cascades](#), [Autophagy](#), [Signaling of Hepatocyte Growth Factor Receptor](#), [BCR Signaling](#)

Application Details

Restrictions: For Research Use only

Handling

Format: Lyophilized

Reconstitution: Please refer to the printed manual for detailed information.

Buffer: Lyophilized from sterile 20 mM Tris, 500 mM NaCl, 10 % glycerol, pH 8.0

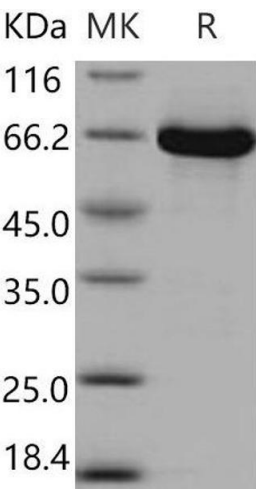
Storage: 4 °C, -20 °C, -80 °C

Storage Comment: Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted

Handling

samples are stable at < -20°C for 3 months.

Images



Western Blotting

Image 1.