Data Sheet (Cat.No.TMPY-04544)

TargetMol

MEK2 Protein, Human, Recombinant (GST)

General Information

Synonyms:	mitogen-activated protein kinase kinase 2;FLJ26075;MKK2;CFC4;PRKMK2;MEK2;MAPKK2
Protein Construction:	A DNA sequence encoding the human MAP2K2 (NP_109587.1) (Met 1-Val 400) was fused with the GST tag at the N-terminus. Predicted N terminal: Met
Species:	Human
Expression Host:	Baculovirus Insect Cells
Accession:	P36507
Molecular Weight:	70.7 kDa (predicted); 66 kDa (reducing conditions)

QC Testing

Biological Activity:	No Kinase Activity
Purity:	> 92 % as determined by SDS-PAGE
Endotoxin:	< 1.0 EU/μg of the protein as determined by the LAL method.
Formulation:	Lyophilized from a solution filtered through a 0.22 μm filter, containing 20 mM Tris, 500 mM NaCl, 2 mM GSH, pH 7.4. Typically, a mixture containing 5% to 8% trehalose, mannitol, and 0.01% Tween 80 is incorporated as a protective agent before lyophilization.

Preparation and Storage

Reconstitution:

A Certificate of Analysis (CoA) containing reconstitution instructions is included with the products. Please refer to the CoA for detailed information.

Stability & Storage:

It is recommended to store recombinant proteins at -20°C to -80°C for future use. Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

Protein Background

Dual specificity mitogen-activated protein kinase kinase 2, also known as MAP kinase kinase 2, MAPKK2, ERK activator kinase 2, MAPK / ERK kinase 2, MEK2 and MAP2K2, is a member of the protein kinase superfamily, STE Ser/Thr protein kinase family and MAP kinase kinase subfamily. MAP2K2 / MEK2 contains one protein kinase domain. MEK1 and MEK2 (also known as MAP2K1 and MAP2K2, respectively) are evolutionarily conserved, dual-specificity kinases that mediate Erk1 and Erk2 activation during adhesion and growth factor signaling. MAP2K1 /

MEK1 is a crucial modulator of Mek and Erk signaling and have potential implications for the role of MEK1 and MEK2 in tumorigenesis. MAP2K2 / MEK2 catalyzes the concomitant phosphorylation of a threonine and a tyrosine residue in a Thr-Glu-Tyr sequence located in MAP kinases. It also activates the ERK1 and ERK2 MAP kinases. Defects in MAP2K2 are a cause of Cardiofaciocutaneous Syndrome (CFC Syndrome) which is characterized by a distinctive facial appearance, heart defects, and mental retardation. Heart defects include pulmonic stenosis, atrial septal defects, and hypertrophic cardiomyopathy.Cancer ImmunotherapyImmune CheckpointImmunotherapyTargeted Therapy

Reference

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