



Recombinant Protein Technical Manual

Recombinant Human MEK2/MAP2K2/MKK2 Protein (GST Tag) RPES1634

Product Data:

Product SKU: RPES1634

Size: 20µg

Species: Human

Expression host: Baculovirus-Insect Cells

Uniprot: NP_109587.1

Protein Information:

Molecular Mass: 70.7 kDa

AP Molecular Mass: 66 kDa

Tag: N-GST

Bio-activity:

Purity: > 92 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

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

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from sterile 20mM Tris, 500mM NaCl, 2mM GSH, pH 7.4

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

Application:

Synonyms: CFC4;FLJ26075;MAPKK2;MEK2;MKK2;PRKMK2

Immunogen Information:

Sequence: Met 1-Val 400

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.