Recombinant Protein Technical Manual

Recombinant Human MAPKAPK3 Protein (GST Tag)

RPES1712

Product Data:

Product SKU: RPES1712

Size: 20µg

Species: Human

Expression host: Baculovirus-Insect Cells

Uniprot: NP_004626.1

Protein Information:

Molecular Mass: 69 kDa

AP Molecular Mass: 69 kDa

Tag: N-GST

Bio-activity:

Purity: > 90 % as determined by reducing SDS-PAGE.

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

Storage: Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.

Shipping: This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at<-20°C.

Formulation: Supplied as sterile 50mM Tris, 100mM NaCl, pH 7.5, 0.25mM DTT, 0.1mM EDTA, 0.5mM PMSF, 10% glycerol

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

Application:

Synonyms: 3PK;MAPKAP-K3;MAPKAP3;MAPKAPK-3;MK-3

Immunogen Information:

Sequence: Met 1-Gln 382

Background:

The MAPKAP kinases are a group of MAP kinase substrates which are themselves kinases. In response to activation, the MAP kinases phosphorylate downstream components on a consensus Pro-X-Ser/Thr-Pro motif. Several kinases that contain this motif have been identifed and serve as substrates for the ERK and p38 MAP kinases. Mitogen-activated protein (MAP) kinase-activated protein kinase 3, also known as MAPKAPK-3 and 3pK, is a member of the Ser/Thr protein kinase family. It is Widely expressed in human tissues, with a higher expression level observed in heart and skeletal muscle. No expression in brain. MAPKAPK-3 is unique since it was shown to be activated by three members of the MAPK family, namely extracellular-signal-regulated kinase (ERK), p38, and Jun-N-terminal kinase (JNK). It is highly activated both by mitogens and by stress-inducing agents or proinflammatory cytokines, and translocates to the cytoplasm from nucleus. MAPKAPK-3 is exclusively activated via the classical MAPK cascade, while stress-induced activation of MAPKAPK-3 is mainly mediated by p38, however the mechanism defining the specificity remains unknown.