

Recombinant Rat M3K11 Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP52526

Size: 10ug, 100ug

Protein Name: Mitogen-activated protein kinase kinase kinase 11 (EC 2.7.11.25) (Mixed lineage kinase 3)

Synonym: Map3k11, Mlk3

UniProt ID: Q66HA1

UniProt Link: www.uniprot.org/uniprotkb/Q66HA1/entry

Species Source: Rat

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 850 AA

Molecular Weight: 93 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MEPLKNLFLKSPLGSWNGSGSGGGGGSGGVRPEGSPKATAAYANPVWTALFDYEPNGQDELALR
KGDRVEVLSRDAAISGDEGWWAGQVGGQVGIFPSNYVSRGGGPPPCEVASFQELRLEEVIIGGGF
GKVYRGSWRGELVAVKAARQDPDEDISVTAESVRQEARLFAMLAHPNIIALKAVCLEEPNLCLVMEY
AAGGPLSRALAGRRVPPHVLNVWAVQIARGMHYHCEALVPVIHRDLKSNNILLQPIEGDDMEHKT
LKITDFGLAREWHKTTQMSAAGTYAWMAPEVIKASTFSKGSVDVWSFGVLLWELLTGEVPYRGIDCL
AVAYGVAVNKLTLPIPSTCPEPFAQLMADCWAQDPHRRPDFASILQQLEALEAQVLREMPRDSFHS
MQEGWKREIQGLFDELRAKEKELLSREEELTRAAREQRSQAEQLRRREHLLAQWELEVFERELTLL
LQQVDRERPHVRRRRRGTFKRSKLARDGGERISMPLDFKHRITVQASPLDRRRNVFEVGAGDSPT
FPRFRAIQLEPAESGQTWGRQSPRRLDDSSNGERRACWAWGPSSPKPGEAQNGRRRRSRMDEAT
WYLDSSDSSPLGSPSTPPALNGNPPRPSPEPEEPRRSGPTERGNSSGTPKLIQRALLRG TALLASL
GLGRDLQPPGGLSRERGESPTAPPPAQMASPCPDLPSTPLIHLSQATPDARGPLTPAPLLLDLGV
SGQPSAKSPRRETRGRTVSPPPGISRSAPGTPGTSPPLGLISRPRPSPLRNRIDPWSFVSAGPR
PSPLPSPQPAPRRAPWTLFPDSDPFWDSPPANPFRGGSQDCRTQTKDVGAAQAPWAPEAGP

3. Buffer Composition



Liquid format: PBS-based buffer containing 50% glycerol. Glycerol concentration can be customized upon customer request; please state special requirements when placing your order.

Lyophilized format: Buffer before lyophilization is PBS supplemented with 6% trehalose.

4. Storage Conditions

Upon receipt, store the product at -20 °C or -80 °C. Aliquot the product for on-demand use to preserve protein activity and prevent denaturation and inactivation caused by repeated freeze-thaw cycles.

5. Product Description

This product is recombinant Mitogen-activated protein kinase kinase kinase 11 (EC 2.7.11.25) (Mixed lineage kinase 3) produced using the HEK293T eukaryotic cell expression system. It is suitable for in-vitro functional assays, protein-protein interaction studies, antibody preparation and other biomedical research applications.

Protein Function: Activates the JUN N-terminal pathway. Required for serum-stimulated cell proliferation and for mitogen and cytokine activation of MAPK14 (p38), MAPK3 (ERK) and MAPK8 (JNK1) through phosphorylation and activation of MAP2K4/MKK4 and MAP2K7/MKK7. Plays a role in mitogen-stimulated phosphorylation and activation of BRAF, but does not phosphorylate BRAF directly. Influences microtubule organization during the cell cycle (By similarity).

Subcellular Localization: Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Note=Location is cell cycle dependent.

6. Notes

- Avoid repeated freeze-thaw cycles to maintain protein stability and biological activity.
- Please specify special buffer-composition requirements at the time of order placement.
- For research use only. Not intended for clinical diagnosis, therapeutic use or commercial manufacturing.