

RPS6KA3/MAPKAPK1B recombinant protein

Recombinant RPS6KA3/MAPKAPK1B protein

CATALOG #
AAA60234

HOST
Baculovirus

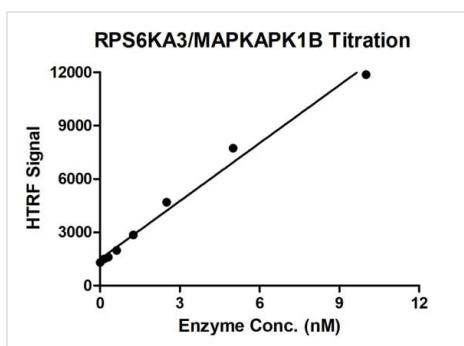
PRODUCT SYNONYMS

RPS6KA3/MAPKAPK1B; Recombinant RPS6KA3/MAPKAPK1B protein; RPS6KA3; ISPK1; MAPKAPK1B; RSK2; Ribosomal protein S6 kinase alpha-3; 90kD ribosomal protein S6 kinase 3; Insulin-stimulated protein kinase 1; MAP kinase-activated protein kinase 1b; Ribosomal S6 kinase 2; pp90RSK2; RPS6KA3/MAPKAPK1B recombinant protein

PRODUCT SPECIFICATIONS

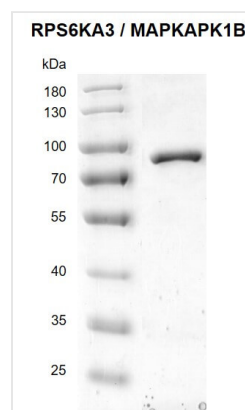
Host	Baculovirus
Form/Format	Recombinant RPS6KA3/MAPKAPK1B protein is supplied in 25mM HEPES-NaOH pH7.5, 300mM NaCl, 10% glycerol, 0.04% Triton X-100, and 0.5mM TCEP.
Protein Species	Human
Tag	DYKDDDDK-Tag
Protein Details	Recombinant RPS6KA3/MAPKAPK1B protein was expressed in a baculovirus expression system as the full length protein (accession number NP_004577.1) with a N-terminal DYKDDDDK tag.
Notes	This product was manufactured as described in Protein Details. Where possible, We has developed functional or activity assays for recombinant proteins. Additional characterization such as enzyme kinetic activity assays, inhibitor screening or other biological activity assays may not have been performed for every product. All available data for a given product is shown on the lot-specific Technical Data Sheet.
Dry Ice Note	The product may be shipped with dry ice, and an additional fee may be added to your shipping cost.
Preparation and Storage	Recombinant proteins in solution are temperature sensitive and must be stored at -80 degree C to prevent degradation. Avoid repeated freeze/thaw cycles and keep on ice when not in storage. Shipping Temp: Dry Ice

IMAGES



Application Data

HTRF assay for RPS6KA3 / MAPKAPK1B activity 1 uM STK S1 substrate was incubated with different concentrations of RPS6KA3 / MAPKAPK1B protein in a 10 ul reaction system containing 1xEnzymatic Buffer, 5 mM MgCl₂, 1 mM DTT, and 100 uM ATP for 1 hour. Then 10 ul detection reagents containing STK antibody (1:2) and SA-XL665 (1:100) diluted with 1x Detection Buffer were added and incubated with the reactions for 30 min. All the operations and reactions were performed at room temperature. HTRF assay was used for detection.



SDS-PAGE

Recombinant RPS6KA3 / MAPKAPK1B protein 10% SDS-PAGE with Coomassie blue staining MW: 84.7 kDa Purity: >95%

ADDITIONAL INFORMATION

Related Product Information for RPS6KA3/MAPKAPK1B recombinant protein	Background: RPS6KA3 also known as MAPKAPK1B is a member of the RSK (ribosomal S6 kinase) family of serine/threonine kinases. This kinase contains 2 non-identical kinase catalytic domains and phosphorylates various substrates, including members of the mitogen-activated kinase (MAPK) signaling pathway. It acts downstream of ERK (MAPK1/ERK2 and MAPK3/ERK1) signaling and mediates mitogenic and stress-induced activation of the transcription factors CREB1, ETV1/ER81 and NR4A1/NUR77. RPS6KA3 also regulates translation through RPS6 and EIF4B phosphorylation, and mediates cellular proliferation, survival, and differentiation by modulating mTOR signaling and repressing pro-apoptotic function of BAD and DAPK1.Diseases associated with RPS6KA3 include Coffin-Lowry Syndrome and Symptomatic Form Of Coffin-Lowry Syndrome In Female Carriers. Among its related pathways are Cellular Senescence (REACTOME) and Activated TLR4 signaling.
Product Categories/Family for RPS6KA3/MAPKAPK1B recombinant protein	Recombinant Proteins; Kinase

NCBI AND UNIPROT INFORMATION

NCBI GI #	4759050
NCBI GeneID	6197
NCBI Accession #	NP_004577.1
NCBI GenBank Nucleotide #	NM_004586.2
UniProt Accession #	P51812; Q4VAP3; Q59H26; Q5JPK8; Q7Z3Z7; B2R9V4
Molecular Weight	740
NCBI Official Full Name	ribosomal protein S6 kinase alpha-3
NCBI Official Synonym Full Names	ribosomal protein S6 kinase, 90kDa, polypeptide 3
NCBI Official Symbol	RPS6KA3
NCBI Official Synonym Symbols	CLS; RSK; HU-3; RSK2; MRX19; ISPK-1; p90-RSK2; pp90RSK2; MAPKAPK1B; S6K-alpha3
NCBI Protein Information	ribosomal protein S6 kinase alpha-3; RSK-2; p90-RSK 3; MAPKAPK-1b; S6K-alpha-3; MAPKAP kinase 1b; ribosomal S6 kinase 2; MAPK-activated protein kinase 1b; insulin-stimulated protein kinase 1; MAP kinase-activated protein kinase 1b
UniProt Protein Name	Ribosomal protein S6 kinase alpha-3
UniProt Gene Name	RPS6KA3
UniProt Synonym Gene Names	ISPK1; MAPKAPK1B; RSK2; S6K-alpha-3; p90-RSK 3; p90RSK3; ISPK-1; MAPK-activated protein kinase 1b; MAPKAP kinase 1b; MAPKAPK-1b; RSK-2
UniProt Entry Name	KS6A3_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.