

Recombinant RPS6KA2/RSK3 protein

Catalog No: 81408, 89408

Expressed In: Baculovirus

Quantity: 20, 1000 µg

Concentration: 0.15 µg/µl

Source: Human

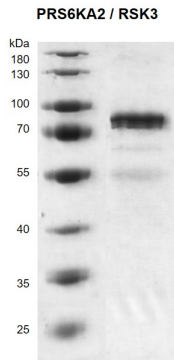
Buffer Contents: Recombinant RPS6KA2 / RSK3 protein is supplied at a concentration in 25 mM HEPES, NaOH pH 7.5, 300 mM NaCl, 10% glycerol, 0.04% Triton X-100, 0.5 mM TCEP.

Background: RPS6KA2 is a member of the RSK (ribosomal S6 kinase) family of serine/threonine kinases. This kinase contains two non-identical kinase catalytic domains and phosphorylates various substrates, including members of the mitogen-activated kinase (MAPK) signalling pathway. RPS6KA2 acts downstream of ERK (MAPK1/ERK2 and MAPK3/ERK1) signaling and mediates mitogenic and stress-induced activation of transcription factors, regulates translation, and mediates cellular proliferation, survival, and differentiation. Diseases associated with RPS6KA2 include Coffin-Lowry Syndrome and Dyskeratosis Congenita, Autosomal Dominant 3.

Protein Details: Recombinant RPS6KA2 / RSK3 protein was expressed in baculovirus expression system as the full-length protein (accession number NP_066958.2) with a N-terminal FLAG tag. The molecular weight of the protein is 84.5 kDa.

Application Notes: This product was manufactured as described in Protein Details. Where possible, Active Motif 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.

Storage and Guarantee: Recombinant proteins in solution are temperature sensitive and must be stored at -80°C to prevent degradation. Avoid repeated freeze/thaw cycles and keep on ice when not in storage. This product is for research use only and is not for use in diagnostic procedures. This product is guaranteed for 6 months from date of arrival.

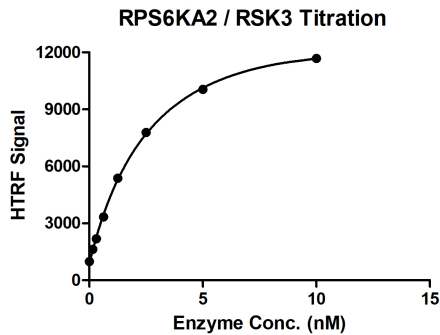


Recombinant RPS6KA2 / RSK3 protein

10% SDS-PAGE Coomassie staining

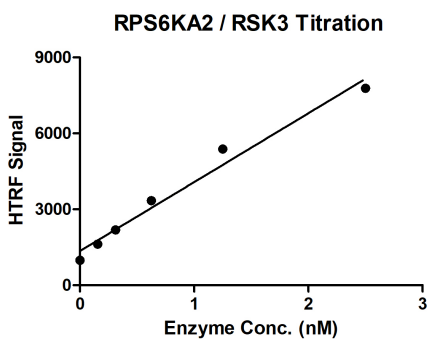
MW: 84.5 kDa

Purity: $\geq 90\%$



HTRF assay for RPS6KA2 / RSK3 protein activity

1 μ M STK S1 substrate was incubated with different concentrations of RPS6KA2 / RSK3 protein in a 10 μ l reaction system containing 1 \times Enzymatic Buffer, 5 mM MgCl₂, 1 mM DTT, and 100 μ M ATP for 1 hour. The 10 μ l detection reagents containing anti-STK antibody (1:2) and SA-XL665 (1:100) diluted with 1 \times 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.



HTRF assay for RPS6KA2 / RSK3 protein activity

1 μ M STK S1 substrate was incubated with different concentrations of RPS6KA2 / RSK3 protein in a 10 μ l reaction system containing 1 \times Enzymatic Buffer, 5 mM MgCl₂, 1 mM DTT, and 100 μ M ATP for 1 hour. The 10 μ l detection reagents containing anti-STK antibody (1:2) and SA-XL665 (1:100) diluted with 1 \times 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.