

Recombinant MAP3K8 (30-397) / COT protein

Catalog No: 81380, 81680

Expressed In: Baculovirus

Quantity: 20, 1000 µg

Concentration: 0.25 µg/µl

Source: Human

Buffer Contents: Recombinant MAP3K8 / COT (30-397) protein is supplied in 25 mM HEPES-NaOH pH 7.5, 300 mM NaCl, 10% glycerol, 0.04% Triton X-100, 0.5 mM TCEP.

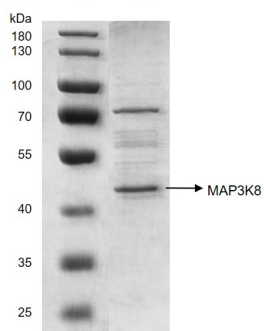
Background: MAP3K8 (Mitogen-Activated Protein Kinase Kinase Kinase 8) is an oncogene that encodes a member of the serine/threonine protein kinase family. The encoded protein localizes to the cytoplasm and can activate both the MAP kinase and JNK kinase pathways. It also involved in the regulation of T-helper cell differentiation and IFNG expression in T-cells and involved in mediating host resistance to bacterial infection through negative regulation of type I interferon (IFN) production. *In vitro*, MAP3K8 activates MAPK/ERK pathway in response to IL1 in an IRAK1-independent manner and leading to up-regulation of IL8 and CCL4 and transduces CD40 and TNFRSF1A signals that activate ERK in B-cells and macrophages. Thus MAP3K8 may play a role in the regulation of immunoglobulin production and may also play a role in the transduction of TNF signals that activate JNK and NF-kappa-B in some cell types. In adipocytes, MAP3K8 activates MAPK/ERK pathway in an IKBKB-dependent manner in response to IL1B and TNF.

Protein Details: Recombinant MAP3K8 / COT (30-397) protein that includes amino acids 30-397 of human MAP3K8 protein (accession number NP_001231063.1) was expressed in a baculovirus expression system, and contains an N-terminal FLAG tag. The molecular weight of the protein is 42.8 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 guaranteed for 6 months from date of arrival.

MAP3K8(30-397) / COT



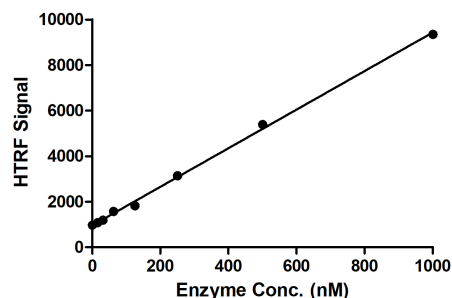
Recombinant MAP3K8 / COT (30-397) protein

10% SDS-PAGE with Coomassie staining

MW: 42.8 kDa

Purity: >50%

MAP3K8(30-397) / COT Titration



HTRF assay for MAP3K8 / COT (30-397) activity

1 μ M STK S3 substrate was incubated with different concentrations of MAP3K8 / COT (30-397) 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. Then 10 μ l detection reagents containing 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.