

Recombinant MAP3K5 (660-978) protein

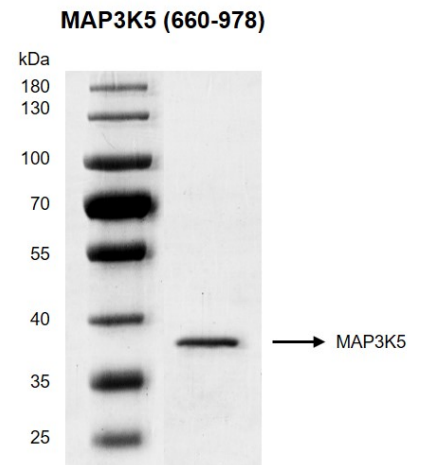
Catalog No: 81333, 81633**Expressed In:** Baculovirus**Quantity:** 20, 1000 µg**Concentration:** 0.2 µg/µl**Source:** Human**Buffer Contents:** Recombinant MAP3K5 (660-978) protein is supplied in 25 mM HEPES/NaOH pH 7.5, 300 mM NaCl, 10% glycerol, 0.04% Triton X-100, and 0.5 mM TCEP.

Background: MAP3K5 (Mitogen-Activated Protein Kinase Kinase Kinase 5), also known as ASK1 is a serine/threonine kinase which acts as an essential component of the MAP kinase signal transduction pathway. It plays an important role in the cascades of cellular responses evoked by changes in the environment and mediates signaling for determination of cell fate such as differentiation and survival. It also plays a crucial role in the apoptosis signal transduction pathway through mitochondria-dependent caspase activation. MAP3K5/ASK1 is required for the innate immune response, which is essential for host defense against a wide range of pathogens and mediates signal transduction of various stressors like oxidative stress as well as by receptor-mediated inflammatory signals, such as the tumor necrosis factor (TNF) or lipopolysaccharide (LPS). Once MAP3K5/ASK1 is activated, it acts as an upstream activator of the MKK/JNK signal transduction cascade and the p38 MAPK signal transduction cascade through the phosphorylation and activation of several MAP kinase kinases like MAP2K4/SEK1, MAP2K3/MKK3, MAP2K6/MKK6 and MAP2K7/MKK7. These MAP2Ks in turn activate p38 MAPKs and c-jun N-terminal kinases (JNKs).

Protein Details: Recombinant MAP3K5 (660-978) protein that includes amino acids 660-978 of human MAP3K5 protein (accession number NP_005914.1) with a N-terminal FLAG Tag. The molecular weight of the protein is 36.8 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 for research use only and is not for use in diagnostic procedures. This product is guaranteed for 6 months from date of arrival.

**Recombinant MAP3K5 (660-978) protein gel**

10% SDS-PAGE with Coomassie blue staining

MW: 36.8 kDa

Purity: >90%