

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human MKK4 in direct ELISAs. This antibody does not cross-react with recombinant human MKK7.
Source	Monoclonal Mouse IgG _{2B} Clone # 323042
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human MKK4 Met1-Asp399 Accession # P45985
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

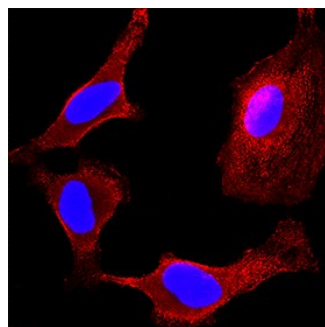
APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Immunocytochemistry	3-25 µg/mL	See Below

DATA

Immunocytochemistry



MKK4 in HeLa Human Cell Line. MKK4 was detected in immersion fixed HeLa human cervical epithelial carcinoma cell line using Mouse Anti-Human MKK4 Monoclonal Antibody (Catalog # MAB3390) at 3 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red; Catalog # NL007) and counterstained with DAPI (blue). Specific staining was localized to cytoplasm and nuclei. View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Mitogen-activated protein kinase kinase 4 (MKK4 or MAP2K4), also known as SAPK/ERK kinase 1 (SEK1) and Jun kinase kinase 1 (JNKK1), is activated by proinflammatory cytokines and environmental stresses. Activation occurs through phosphorylation at Ser257 and Thr261 by several upstream MAPK kinase kinases (MAP3Ks). MKK4 is a dual specificity protein kinase, phosphorylating and activating the JNK family of MAP kinases at Thr and Tyr positions within the phosphoacceptor sequence Thr-Pro-Tyr.