

ORDERING INFORMATION

Catalog Number: MAB3390

Clone: 323042

Lot Number: XVW01

Size: 100 µg

Formulation: 0.2 µm filtered solution in PBS with 5% trehalose

Storage: -20° C

Specificity: human MKK4

Immunogen: *E. coli*-derived rhMKK4

Ig class: mouse IgG_{2b}

Recommended Application:
Immunocytochemistry

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.

Preparation

This antibody was produced from a hybridoma resulting from the fusion of a mouse myeloma with B cells obtained from a mouse immunized with purified, *E. coli*-derived full-length recombinant human MKK4 (rhMKK4; aa 1 - 399; Accession # P45985). The IgG fraction of the tissue culture supernatant was purified by Protein G affinity chromatography.

Formulation

Lyophilized from a 0.2 µm filtered solution in phosphate-buffered saline (PBS) with 5% trehalose.

Reconstitution

Reconstitute with sterile PBS. If 0.2 mL of PBS is used, the antibody concentration will be 500 µg/mL.

Storage

Lyophilized samples are stable for twelve months from date of receipt when stored at -20° C to -70° C. Upon reconstitution, the antibody can be stored at 2° - 8° C for 1 month without detectable loss of activity. Reconstituted antibody can also be aliquotted and stored frozen at -20° C to -70° C in a manual defrost freezer for six months without detectable loss of activity. **Avoid repeated freeze-thaw cycles.**

Specificity

This antibody was selected for its ability to detect human MKK4 by immunocytochemistry. Reactivity with MKK4 from other species has not been determined. Using direct ELISA, the antibody does not detect rhMKK7.

Application

Immunocytochemistry - This antibody was used at a concentration of 25 µg/mL with the appropriate secondary reagents to detect MKK4 in fixed human peripheral blood mononuclear cells. For chromogenic detection of labeling, the use of R&D Systems' Cell and Tissue Staining Kits (CTS Series) is recommended.

Optimal dilutions should be determined by each laboratory for each application.

For immunohistochemistry images, please refer to our website at

<http://www.rndsystems.com/go/ihc>.