

Product Information

Size:

5µg

Applications:

Western Blot, Immunofluorescence, ELISA

Reactivity:

Human

Source:

Mouse

Isotype:

IgG2b

Purification Method:

MAPK1 antibody was purified from mouse ascitic fluids by protein-G affinity chromatography.

Protein Background:

Mitogen-activated protein kinase 1 (MAPK1) is also known as "extracellular signal-regulated kinase 2" (ERK2). Two similar (85% sequence identity) protein kinases were originally called ERK1 and ERK2. They were found during a search for protein kinases that are rapidly phosphorylated after activation of cell surface tyrosine kinases such as the epidermal growth factor receptor. Phosphorylation of ERKs leads to the activation of their kinase activity. The molecular events linking cell surface receptors to activation of ERKs are complex. It was found that RasGTP-binding proteins are involved in the activation of ERKs. Another protein kinase, Raf-1, was shown to phosphorylate a "MAPK kinase", thus qualifying as a "MAPK kinase kinase". The MAPK kinase was named "MAPK/ERK kinase" (MEK). Receptor-linked tyrosine kinases, Ras, Raf, MEK and MAPK could be fitted into a signaling cascade linking an extracellular signal to MAPK activation. Transgenic gene knockout mice lacking MAPK1 have major defects in early development.

Synonyms:

Mitogen-activated protein kinase 1, EC 2.7.11.24, Extracellular signal-regulated kinase 2, ERK-2, Mitogen-activated protein kinase 2, MAP kinase 2, MAPK 2, p42-MAPK, ERK1, ERK, p38, p40, p41, ERK2, MAPK2, PRKM1, PRKM2, P42MAPK, p41mapk.

Immunogen:

Anti-human MAPK1 mAb, is derived from hybridization of mouse F myeloma cells with spleen cells from BALB/c mice immunized with recombinant human MAPK1 amino acids 1-36 purified from E. coli.

Storage:

For periods up to 1 month store at 4°C, for longer periods of time, store at -20°C. Prevent freeze thaw cycles.