

Monoclonal Antibody to MAPK10

Cat. #: Mab-606115

Description:

MAPK10 (mitogen-activated protein kinase 10), also called JNK3, which is located on chromosome 4q22.1-q23, JNK is an important contributor to stress-induced apoptosis, its isoforms (JNK1, JNK2, and JNK3) have distinct roles in cerebral ischemia. JNK1 is the major isoform responsible for the high level of basal JNK activity in the brain. In contrast, targeted deletion of Jnk3 not only reduces the stress-induced JNK activity, but also protects mice from brain injury after cerebral ischemia-hypoxia. The downstream mechanism of JNK3-mediated apoptosis include the induction of Bim and Fas and the mitochondrial release of cytochrome c. which suggest that JNK3 is a potential target for neuroprotection therapies in stroke. JNK3 is crucial for neuronal apoptosis (stress-induced) and selectively expressed in the nervous system and heart.

Immunogen/Specificity:

Ni-NTA purified truncated recombinant MAPK10 expressed in E. Coli strain BL21 (DE3)

Applications :

Western Blot: 1: 500- 1: 1,000

IHC(P): 1: 500- 1: 1,000

ELISA: Propose dilution 1: 10,000.

Determining optimal working dilutions by titration test.

Formulation

Antibodies are purified by protein A affinity chromatography

Reference:

1. Gupta, S., et al. 1996. EMBO J. 15: 2760-2770.
2. Chia-Yi K, Alan J., Derek D. Y, 2000. Int. J. Biochem. Cell Biol, 32: 581-587.
3. Irving, E. A. & Bamford, M. 2002. J. Cereb. Blood Flow Metab. 22:631-647.
4. Martin, J. H., Mohit, A. A. & Miller, C. A. 1996. Brain Res. Mol. Brain Res. 35:47-57.
5. Kuan, C. Y., Yang, D. D., Samanta Roy, D. R., et al. 1999. Neuron 22:667-676.

Clone Number 8A5D11

Isotype: IgG1

Species: Human

Storage and Stability: stored at -20 C

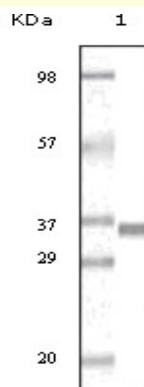
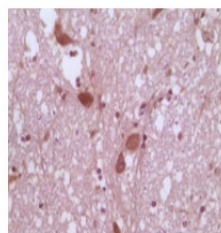
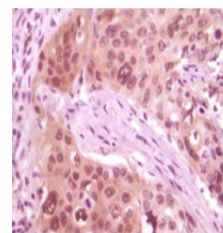


Figure 1: Western blot analysis using anti-Human MAPK10 monoclonal antibody against recombinant MAPK10.



Human brain tissue



Human lung cancer tissue

Figure 2: Immunohistochemical analysis of paraffin-embedded human brain tissue and lung carcinoma tissue, showing nuclear/cytoplasmic localization using MAPK10 with DAB staining.