SANTA CRUZ BIOTECHNOLOGY, INC.

MAPKAP-1 (H-300): sc-366259



BACKGROUND

Mitogen-activated protein kinase associated protein 1 (MAPKAP-1) is a protein that localizes in the nucleus and is involved in several different signal transduction pathways. MAPKAP-1 contains one stress-activated map kinase interacting 1 domain (Pfam), a 2nd peroximal domain, and an ER membrane domain (Psort2). MAPKAP-1 binds to and inhibits c-Jun N-terminal kinase (JNK), and may act as a scaffold molecule in the regulation of JNK signaling. Transcription of the MAPKAP-1 gene is activated any time the organism is wounded, and stress to the cell causes the MAPKAP-1 protein to be phosphorylated. Cells lacking this protein may display sterility, multiple stress sensitivity, and a cell-cycle delay.

REFERENCES

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- Gaestel, M. 2006. MAPKAP kinases-MKs-two's company, three's a crowd. Nature reviews. Nat. Rev. Mol. Cell Biol. 7: 120-130.
- Cordes, T., et al. 2006. Modulation of MAPK ERK1 cell lines. Anticancer Res. 26: 2749-2753.
- Culbert, A.A., et al. 2006. MAPK-activated protein kinase 2 deficiency in microglia inhibits pro-inflammatory mediator release and resultant neurotoxicity. Relevance to neuroinflammation in a transgenic mouse model of Alzheimer disease. J. Biol. Chem. 281:23658-23667.
- Kervinen, J., et al. 2006. Effect of construct design on MAPKAP kinase-2 activity, thermodynamic stability and ligand-binding affinity. Arch. Biochem. Biophys. 449: 47-56.
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CHROMOSOMAL LOCATION

Genetic locus: MAPKAP1 (human) mapping to 9q33.3; Mapkap1 (mouse) mapping to 2 B.

SOURCE

MAPKAP-1 (H-300) is a rabbit polyclonal antibody raised against amino acids 151-450 mapping within an internal region of MAPKAP-1 of human origin.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

MAPKAP-1 (H-300) is recommended for detection of MAPKAP-1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

MAPKAP-1 (H-300) is also recommended for detection of MAPKAP-1 in additional species, including equine, canine, bovine and avian.

Suitable for use as control antibody for MAPKAP-1 siRNA (h): sc-60984, MAPKAP-1 siRNA (m): sc-60985, MAPKAP-1 shRNA Plasmid (h): sc-60984-SH, MAPKAP-1 shRNA Plasmid (m): sc-60985-SH, MAPKAP-1 shRNA (h) Lentiviral Particles: sc-60984-V and MAPKAP-1 shRNA (m) Lentiviral Particles: sc-60985-V.

Molecular Weight of MAPKAP-1: 59 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker[™] Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz[™] Mounting Medium: sc-24941.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

MONOS Satisfation Guaranteed

Try **MAPKAP-1 (F-3): sc-393166**, our highly recommended monoclonal alternative to MAPKAP-1 (H-300).