MEK-1 (H-8): sc-6250

**BACKGROUND**

A family of protein kinases located upstream of the MAP kinases and responsible for their activation has been identified. The prototype member of this family, designated MAP kinase kinase kinase, or MEK-1, specifically phosphorylates the MAP kinase regulatory threonine and tyrosine residues present in the Thr-Glu-Tyr motif of ERK. A second MEK family member, MEK-2, resembles MEK-1 (its substrate specificity. MEK-3 (or M KK-3) functions to activate p38 MAP kinase, and MEK-4 (also called SEK1 or MKK-4) activates both p38 and JNK MAP kinases. MEK-5 appears to specifically phosphorylate ERK5, whereas MEK-6 phosphorylates p38 and p38b. MEK-7 (or M KK-7) phosphorylates and activates the JNK signal transduction pathway.

**CHROMOSOMAL LOCATION**

Genetic locus: MAP2K1 (human) mapping to 15q22.31; Map2k1 (mouse) mapping to 9 C.

**SOURCE**

MEK-1 (H-8) is a mouse monoclonal antibody raised against amino acids 1-393 representing full length MEK-1 of human origin.

**PRODUCT**

Each vial contains 200 µg IgG2b kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

MEK-1 (H-8) is available conjugated to agarose (sc-6250 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-6250 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-6250 PE), fluorescein (sc-6250 FITC), Alexa Fluor® 488 (sc-6250 AF488), Alexa Fluor® 546 (sc-6250 AF546), Alexa Fluor® 594 (sc-6250 AF594), Alexa Fluor® 647 (sc-6250 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 580 (sc-6250 AF580) or Alexa Fluor® 790 (sc-6250 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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**APPLICATIONS**

MEK-1 (H-8) is recommended for detection of MEK-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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

MEK-1 (H-8) is also recommended for detection of MEK-1 in additional species, including bovine.

Suitable for use as control antibody for MEK-1 siRNA (h): sc-29396, MEK-1 siRNA (m): sc-35904, MEK-1 shRNA Plasmid (h): sc-29396-SH, MEK-1 shRNA Plasmid (m): sc-35904-SH, MEK-1 shRNA (h) Lentiviral Particles: sc-29396-V and MEK-1 shRNA (m) Lentiviral Particles: sc-35904-V.

Molecular Weight of MEK-1: 45 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200.

**STORAGE**

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

**DATA**

Western blot analysis of MEK-1/2 phosphorylation in untreated (A, D), serum-starved, PMA-treated (B, E), serum-starved, PMA and lambda protein phosphatase (sc-200212A) treated (C, F) Hela whole cell lysates. Antibodies tested include p-MEK-1/2 (sc10533) and MEK-1 (H-8): sc-6250 (D, E, F).

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

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