

MKP-6 (E-20): sc-48040

BACKGROUND

The deduced 198 amino acid MAP kinase phosphatase 6 (MKP-6), also designated MAP6 and dual-specificity phosphatase 14 (DUSP14), is homologous to other MKP family proteins in that it has a conserved, centrally located, catalytic core, but differs from traditional MKP proteins because it contains unique N- and C-terminal regions. Binding and deletion analyses have established that the interaction between the cytoplasmic tail of CD28 (a T cell antigen) and MKP-6 occurs at Tyr 200 of CD28 and is specific for both MKP-6 and CD28; however, Tyr 200 can be mutated to Phe 200 without a loss of binding ability. Functional analysis indicates that MKP-6 dephosphorylates ERK, JNK and p38 while acting as a negative regulator of CD28 signaling. MKP-6 is expressed ubiquitously, although expression is stronger in certain cell types and tissues than in others.

CHROMOSOMAL LOCATION

Genetic locus: DUSP14 (human) mapping to 17q12; Dusp14 (mouse) mapping to 11 C.

SOURCE

MKP-6 (E-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of MKP-6 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, ready P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

MKP-6 (E-20) is recommended for detection of MKP-6 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).

MKP-6 (E-20) is also recommended for detection of MKP-6 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for MKP-6 siRNA (h): sc-61050, MKP-6 siRNA (m): sc-61051, MKP-6 shRNA Plasmid (h): sc-61050-SH, MKP-6 shRNA Plasmid (m): sc-61051-SH, MKP-6 shRNA (h) Lentiviral Particles: sc-61050-V and MKP-6 shRNA (m) Lentiviral Particles: sc-61051-V.

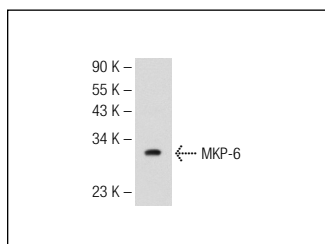
Molecular Weight of MKP-6: 26 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227.

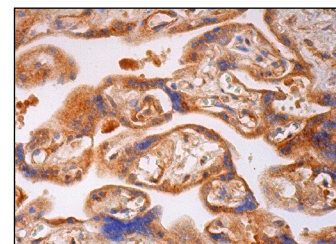
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



MKP-6 (E-20): sc-48040. Western blot analysis of MKP-6 expression in Hep G2 whole cell lysate.



MKP-6 (E-20): sc-48040. Immunoperoxidase staining of formalin fixed, paraffin-embedded human placenta tissue showing cytoplasmic staining of trophoblastic cells.

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
Satisfaction
Guaranteed

Try **MKP-6 (4B5-E6): sc-517023**, our highly recommended monoclonal alternative to MKP-6 (E-20).