

# MAPK1IP1L (C-16): sc-243408

## BACKGROUND

MAPK1IP1L (mitogen-activated protein kinase 1 interacting protein 1-like), also known as MISS, is a 245 amino acid protein that belongs to the MISS family and is encoded by a gene that maps to human chromosome 14q22.3. Chromosome 14 contains about 700 genes and 106 million base pairs and makes up about 3.5% of human cellular DNA. Chromosome 14 encodes the presenilin 1 (PSEN1) gene, which is one of the three key genes associated with the development of Alzheimer's disease. The SERPINA1 gene is located on chromosome 14 and when defective leads to the genetic disorder  $\alpha$ 1-antitrypsin deficiency. This disorder is characterized by severe lung complications and liver dysfunction. Notably, the immunoglobulin heavy chain locus is found on chromosome 14 and has been identified as a fusion with the chromosome 19 encoded protein BCL3 in the (14;19) translocations found in a variety of B cell malignancies.

## REFERENCES

1. Heilig, R., et al. 2003. The DNA sequence and analysis of human chromosome 14. *Nature* 421: 601-607.
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3. Stolk, J., et al. 2006.  $\alpha$ 1-antitrypsin deficiency: current perspective on research, diagnosis, and management. *Int. J. Chron. Obstruct. Pulmon. Dis.* 1: 151-160.
4. Vetrivel, K.S., et al. 2006. Pathological and physiological functions of presenilins. *Mol. Neurodegener.* 1: 4.
5. Albani, D., et al. 2007. Presenilin-1 mutation E318G and familial Alzheimer's disease in the Italian population. *Neurobiol. Aging* 28: 1682-1688.
6. Cruz, P.E., et al. 2007. The promise of gene therapy for the treatment of  $\alpha$ 1 antitrypsin deficiency. *Pharmacogenomics* 8: 1191-1198.
7. Filley, C.M., et al. 2007. The genetics of very early onset Alzheimer disease. *Cogn. Behav. Neurol.* 20: 149-156.

## CHROMOSOMAL LOCATION

Genetic locus: MAPK1IP1L (human) mapping to 14q22.3.

## SOURCE

MAPK1IP1L (C-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of MAPK1IP1L of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-243408 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

MAPK1IP1L (C-16) is recommended for detection of MAPK1IP1L of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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).

MAPK1IP1L (C-16) is also recommended for detection of MAPK1IP1L in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for MAPK1IP1L siRNA (h): sc-92167, MAPK1IP1L shRNA Plasmid (h): sc-92167-SH and MAPK1IP1L shRNA (h) Lentiviral Particles: sc-92167-V.

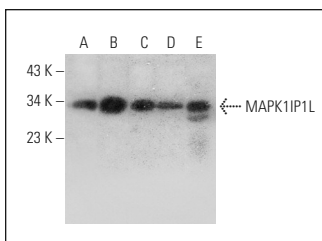
Molecular Weight of MAPK1IP1L: 24 kDa.

Positive Controls: Y79 cell lysate: sc-2240, HeLa whole cell lysate: sc-2200 or Jurkat whole cell lysate: sc-2204.

## 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.

## DATA



MAPK1IP1L (C-16): sc-243408. Western blot analysis of MAPK1IP1L expression in Y79 (A), U-251-MG (B), HeLa (C) and Jurkat (D) whole cell lysates and human tonsil tissue extract (E).

## 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.