

ZC3H12D (E-14): sc-169839

BACKGROUND

The zinc finger CCCH domain-containing protein 12D (ZC3H12D), also known as p34, TFL, MCP1P4 (MCP-induced protein 4), is a 527 amino acid protein that contains one C3H1-type zinc finger domain and belongs to the ZC3H12 family. ZC3H12D is thought to function as a novel tumor suppressor and RNase, thereby modifying levels of target RNA. Existing as two alternatively spliced isoforms, ZC3H12D binds magnesium as a cofactor has been found to be induced in THP-1 cells when exposed to lipopolysaccharide (LPS) over a prolonged period of time. The gene encoding ZC3H12D maps to human chromosome 6q25.1, which falls within a region associated with lung cancer susceptibility, and a ZC3H12D chromosomal aberration may be the cause of diffuse large B-cell lymphoma from follicular lymphoma.

REFERENCES

1. Bailey-Wilson, J.E., et al. 2004. A major lung cancer susceptibility locus maps to chromosome 6q23-25. *Am. J. Hum. Genet.* 75: 460-474.
2. Minagawa, K., et al. 2007. Deregulation of a possible tumour suppressor gene, ZC3H12D, by translocation of IGK@ in transformed follicular lymphoma with t(2;6)(p12;q25). *Br. J. Haematol.* 139: 161-163.
3. Wang, M., et al. 2007. Identification of a novel tumor suppressor gene p34 on human chromosome 6q25.1. *Cancer Res.* 67: 93-99.
4. Online Mendelian Inheritance in Man, OMIM™. 2007. Johns Hopkins University, Baltimore, MD. MIM Number: 611106. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
5. Liang, J., et al. 2008. A novel CCCH-zinc finger protein family regulates proinflammatory activation of macrophages. *J. Biol. Chem.* 283: 6337-6346.

CHROMOSOMAL LOCATION

Genetic locus: Zc3h12d (mouse) mapping to 10 A1.

SOURCE

ZC3H12D (E-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of ZC3H12D of mouse 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, sc-169839 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.

PROTOCOLS

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

APPLICATIONS

ZC3H12D (E-14) is recommended for detection of ZC3H12D of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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); non cross-reactive with ZC3H12B or ZC3H12C.

Suitable for use as control antibody for ZC3H12D siRNA (m): sc-155463, ZC3H12D shRNA Plasmid (m): sc-155463-SH and ZC3H12D shRNA (m) Lentiviral Particles: sc-155463-V.

Molecular Weight of ZC3H12D: 58 kDa.

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) 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.

RESEARCH USE

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