

## ZC3H12B (G-13): sc-169836

### BACKGROUND

The zinc finger CCCH domain-containing protein 12B (ZC3H12B), also known as MCP1P2 (MCP-induced protein 2), is an 825 amino acid protein that contains one C3H1-type zinc finger and belongs to the ZC3H12 family. ZC3H12B is suggested to function as an RNase, and thereby modifies levels of target RNA. Existing as two alternatively spliced isoforms, ZC3H12B binds magnesium as a cofactor and is expressed in murine fetal heart. The gene encoding ZC3H12B maps to human chromosome Xq12 and mouse chromosome X C3. Chromosome X consists of about 153 million base pairs and nearly 1,000 genes. Color blindness, hemophilia, and Duchenne muscular dystrophy are well known X chromosome-linked conditions which affect males more frequently as males carry a single X chromosome.

### REFERENCES

1. Gianfrancesco, F., et al. 2001. Differential divergence of three human pseudoautosomal genes and their mouse homologs: implications for sex chromosome evolution. *Genome Res.* 11: 2095-2100.
2. Bernardino-Sgheri, J., et al. 2002. Overall DNA methylation and chromatin structure of normal and abnormal X chromosomes. *Cytogenet. Genome Res.* 99: 85-91.
3. Gerhard, D.S., et al. 2004. The status, quality, and expansion of the NIH full-length cDNA project: the Mammalian Gene Collection (MGC). *Genome Res.* 14: 2121-2127.
4. Ross, M.T., et al. 2005. The DNA sequence of the human X chromosome. *Nature* 434: 325-337.
5. Liang, J., et al. 2008. A novel CCCH-zinc finger protein family regulates pro-inflammatory activation of macrophages. *J. Biol. Chem.* 283: 6337-6346.
6. Joziassse, I.C., et al. 2009. A duplication including GATA4 does not co-segregate with congenital heart defects. *Am. J. Med. Genet. A* 149A: 1062-1066.

### CHROMOSOMAL LOCATION

Genetic locus: ZC3H12B (human) mapping to Xq12; Zc3h12b (mouse) mapping to X C3.

### SOURCE

ZC3H12B (G-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of ZC3H12B 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, sc-169836 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

ZC3H12B (G-13) is recommended for detection of ZC3H12B of mouse, rat and human 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), 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); non cross-reactive with ZC3H12C or ZC3H12D.

ZC3H12B (G-13) is also recommended for detection of ZC3H12B in additional species, including equine.

Suitable for use as control antibody for ZC3H12B siRNA (h): sc-91195, ZC3H12B siRNA (m): sc-155461, ZC3H12B shRNA Plasmid (h): sc-91195-SH, ZC3H12B shRNA Plasmid (m): sc-155461-SH, ZC3H12B shRNA (h) Lentiviral Particles: sc-91195-V and ZC3H12B shRNA (m) Lentiviral Particles: sc-155461-V.

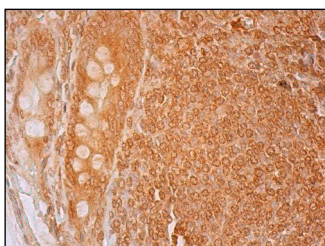
Molecular Weight of ZC3H12B isoform 1: 93 kDa.

Molecular Weight of ZC3H12B isoform 2: 87 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. 3) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

### DATA



ZC3H12B (G-13): sc-169836. Immunoperoxidase staining of formalin fixed, paraffin-embedded human appendix tissue showing nuclear and cytoplasmic staining of glandular cells and lymphoid cells.

### RESEARCH USE

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

### PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.