

ZBTB8OS (G-14): sc-139195

BACKGROUND

ZBTB8OS (zinc finger and BTB domain-containing opposite strand protein 8), also known as protein archease or ARCH, is a 167 amino acid protein. Existing as two alternatively spliced isoforms, the gene encoding ZBTB8OS maps to human chromosome 1p35.1 and mouse chromosome 4 D2.2. Chromosome 1 is the largest human chromosome spanning about 260 million base pairs and making up 8% of the human genome. There are about 3,000 genes on chromosome 1, and considering the great number of genes there are also a large number of diseases associated with this chromosome. Notably, the rare aging disease Hutchinson-Gilford progeria is associated with the LMNA gene which encodes lamin A. When defective, the LMNA gene product can build up in the nucleus and cause characteristic nuclear blebs. Stickler syndrome, Parkinsons, Gaucher disease and Usher syndrome are also associated with chromosome 1.

REFERENCES

1. Watson, M.L., et al. 1990. Genomic organization of the selectin family of leukocyte adhesion molecules on human and mouse chromosome 1. *J. Exp. Med.* 172: 263-272.
2. Blackwood, D.H., et al. 2001. Schizophrenia and affective disorders— cosegregation with a translocation at chromosome 1q42 that directly disrupts brain-expressed genes: clinical and P300 findings in a family. *Am. J. Hum. Genet.* 69: 428-433.
3. Weise, A., et al. 2005. New insights into the evolution of chromosome 1. *Cytogenet. Genome Res.* 108: 217-222.
4. Lans, H. and Hoeijmakers, J.H. 2006. Cell biology: aging nucleus gets out of shape. *Nature* 440: 32-34.
5. Gregory, S.G., et al. 2006. The DNA sequence and biological annotation of human chromosome 1. *Nature* 441: 315-321.
6. Hennah, W., et al. 2006. Genes and schizophrenia: beyond schizophrenia: the role of DISC-1 in major mental illness. *Schizophr. Bull.* 32: 409-416.
7. Marzin, Y., et al. 2006. Chromosome 1 abnormalities in multiple myeloma. *Anticancer Res.* 26: 953-959.

CHROMOSOMAL LOCATION

Genetic locus: ZBTB8OS (human) mapping to 1p35.1; Zbtb8os (mouse) mapping to 4 D2.2.

SOURCE

ZBTB8OS (G-14) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of ZBTB8OS of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-139195 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ZBTB8OS (G-14) is recommended for detection of ZBTB8OS of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other ZBTB family members.

ZBTB8OS (G-14) is also recommended for detection of ZBTB8OS in additional species, including equine, canine and bovine.

Suitable for use as control antibody for ZBTB8OS siRNA (h): sc-78629, ZBTB8OS siRNA (m): sc-155457, ZBTB8OS shRNA Plasmid (h): sc-78629-SH, ZBTB8OS shRNA Plasmid (m): sc-155457-SH, ZBTB8OS shRNA (h) Lentiviral Particles: sc-78629-V and ZBTB8OS shRNA (m) Lentiviral Particles: sc-155457-V.

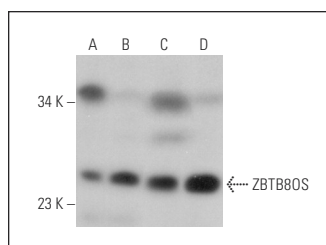
Molecular Weight of ZBTB8OS isoforms 1/2: 19/16 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203, Caco-2 cell lysate: sc-2262 or Hep G2 cell lysate: sc-2227.

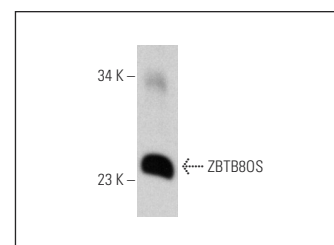
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



ZBTB8OS (G-14): sc-139195. Western blot analysis of ZBTB8OS expression in Daudi (A), Hep G2 (B), NTERA-2 cl.D1 (C) and Caco-2 (D) whole cell lysates.



ZBTB8OS (G-14): sc-139195. Western blot analysis of ZBTB8OS expression in K-562 whole cell lysate.

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.