

SH3TC1 (L-14): sc-136858

BACKGROUND

SH3TC1 (SH3 domain and tetratricopeptide repeats-containing protein 1) is a 1,336 amino acid protein containing one src-homology 3 (SH3) domain and 9 tetratricopeptide (TPR) repeats. SH3 domains bind to proline-rich peptides, and tertiary interactions involving loops on the SH3 domain lead to increased binding affinity and specificity. TPR domains play an important role in protein-protein interactions. The gene encoding SH3TC1 maps to human chromosome 4, which houses nearly 6% of the human genome and has the largest gene deserts (regions of the genome with no protein encoding genes) of all of the human chromosomes. Defects in some of the genes located on chromosome 4 are associated with Huntington's disease, Ellis-van Creveld syndrome, methylmalonic acidemia and polycystic kidney disease.

REFERENCES

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- Rubinsztein, D.C. and Carmichael, J. 2003. Huntington's disease: molecular basis of neurodegeneration. *Expert Rev. Mol. Med.* 5: 1-21.
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- Cagdas, D.N., et al. 2008. A Turkish family with Ellis-van Creveld syndrome in six siblings; linkage analysis on 4p16 region (D4S3360-D4S2366). *Genet. Couns.* 19: 387-395.

CHROMOSOMAL LOCATION

Genetic locus: SH3TC1 (human) mapping to 4p16.1; Sh3tc1 (mouse) mapping to 5 B3.

SOURCE

SH3TC1 (L-14) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the C-terminus of SH3TC1 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-136858 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

SH3TC1 (L-14) is recommended for detection of SH3TC1 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 SH3TC2.

SH3TC1 (L-14) is also recommended for detection of SH3TC1 in additional species, including equine, canine and porcine.

Suitable for use as control antibody for SH3TC1 siRNA (h): sc-89317, SH3TC1 siRNA (m): sc-153441, SH3TC1 shRNA Plasmid (h): sc-89317-SH, SH3TC1 shRNA Plasmid (m): sc-153441-SH, SH3TC1 shRNA (h) Lentiviral Particles: sc-89317-V and SH3TC1 shRNA (m) Lentiviral Particles: sc-153441-V.

Molecular Weight (predicted) of SH3TC1: 147 kDa.

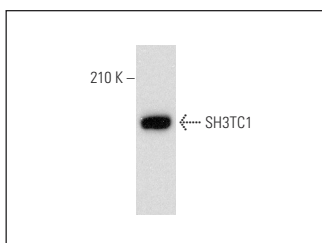
Molecular Weight (observed) of SH3TC1: 170 kDa.

Positive Controls: mouse thymus extract: sc-2406.

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



SH3TC1 (L-14): sc-136858. Western blot analysis of SH3TC1 expression in mouse thymus tissue extract.

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.