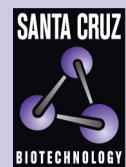


TIGD4 (E-15): sc-248821



BACKGROUND

TIGD4 (tigger transposable element-derived protein 4) is a 512 amino acid protein belonging to the tigger transposable element derived protein family. Localizing to nucleus, TIGD4 contains one DDE domain, one HTH CENPB-type DNA-binding domain, and one HTH psq-type DNA-binding domain. TIGD4 undergoes phosphorylation upon DNA damage, and is related to DNA transposons from nematodes and fungi. The gene encoding TIGD4 maps to human chromosome 4q31.3. Chromosome 4 represents approximately 6% of the human genome and contains nearly 900 genes. Notably, the Huntingtin gene, which is found to encode an expanded glutamine tract in cases of Huntington's disease, is on chromosome 4. FGFR-3 is also encoded by a gene that maps to human chromosome 4 and has been associated with thanatophoric dwarfism, achondroplasia, Muenke syndrome and bladder cancer. Chromosome 4 is also tied to Ellis-van Creveld syndrome, methylmalonic acidemia and polycystic kidney disease.

REFERENCES

1. Bonaventure, J., et al. 1996. Common mutations in the fibroblast growth factor receptor 3 (FGFR 3) gene account for achondroplasia, hypochondroplasia, and thanatophoric dwarfism. *Am. J. Med. Genet.* 63: 148-154.
2. Kalchman, M.A., et al. 1996. Huntingtin is ubiquitinated and interacts with a specific ubiquitin-conjugating enzyme. *J. Biol. Chem.* 271: 19385-19394.
3. Singhrao, S.K., et al. 1998. Huntingtin protein colocalizes with lesions of neurodegenerative diseases: An investigation in Huntington's, Alzheimer's, and Pick's diseases. *Exp. Neurol.* 150: 213-222.
4. Krakow, D., et al. 2000. Exclusion of the Ellis-van Creveld region on chromosome 4p16 in some families with asphyxiating thoracic dystrophy and short-rib polydactyly syndromes. *Eur. J. Hum. Genet.* 8: 645-648.

CHROMOSOMAL LOCATION

Genetic locus: TIGD4 (human) mapping to 4q31.3; Tigd4 (mouse) mapping to 3 F1.

SOURCE

TIGD4 (E-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of TIGD4 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-248821 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-248821 X, 200 µg/0.1 ml.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

TIGD4 (E-15) is recommended for detection of TIGD4 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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); non cross-reactive with other TIGD family members.

TIGD4 (E-15) is also recommended for detection of TIGD4 in additional species, including bovine.

Suitable for use as control antibody for TIGD4 siRNA (h): sc-89321, TIGD4 siRNA (m): sc-154270, TIGD4 shRNA Plasmid (h): sc-89321-SH, TIGD4 shRNA Plasmid (m): sc-154270-SH, TIGD4 shRNA (h) Lentiviral Particles: sc-89321-V and TIGD4 shRNA (m) Lentiviral Particles: sc-154270-V.

TIGD4 (E-15) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

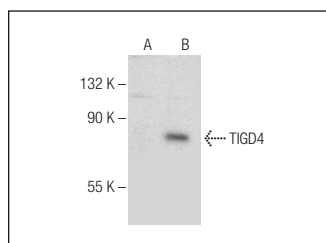
Molecular Weight of TIGD4: 57 kDa.

Positive Controls: TIGD4 (h): 293T Lysate: sc-371207, 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



TIGD4 (E-15): sc-248821. Western blot analysis of TIGD4 expression in non-transfected: sc-117752 (A) and human TIGD4 transfected: sc-371207 (B) 293T whole cell lysates.

RESEARCH USE

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