SANTA CRUZ BIOTECHNOLOGY, INC.

TIGD1 (S-12): sc-137845



BACKGROUND

TIGD1 (tigger transposable element derived 1), also known as EEYORE, is a 591 amino acid nuclear protein that belongs to the tigger transposable element derived protein family. TIGD1 contains one DDE domain, an HTH CENPBtype DNA-binding domain and a single HTH psg-type DNA-binding domain. The gene encoding TIGD1 maps to human chromosome 2, which consists of 237 million bases, encodes over 1,400 genes and makes up approximately 8% of the human genome. A number of genetic diseases are linked to genes on chromosome 2. Harlequin icthyosis, a rare and morbid skin deformity, is associated with mutations in the ABCA12 gene. The lipid metabolic disorder sitosterolemia is associated with ABCG5 and ABCG8. An extremely rare recessive genetic disorder, Alström syndrome, is due to mutations in the ALMS1 gene. Interestingly, chromosome 2 contains what appears to be a vestigial second centromere and vestigial telomeres which gives credence to the hypothesis that human chromosome 2 is the result of an ancient fusion of two ancestral chromosomes seen in modern form today in apes.

REFERENCES

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- 3. Patel, S.B., et al. 1998. Mapping a gene involved in regulating dietary cholesterol absorption. The sitosterolemia locus is found at chromosome 2p21. J. Clin. Invest. 102: 1041-1044.
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- 5. Shulenin, S., et al. 2001. An ATP-binding cassette gene (ABCG5) from the ABCG (White) gene subfamily maps to human chromosome 2p21 in the region of the Sitosterolemia locus. Cytogenet. Cell Genet. 92: 204-208.
- 6. Hearn, T., et al. 2002. Mutation of ALMS1, a large gene with a tandem repeat encoding 47 amino acids, causes Alström syndrome. Nat. Genet. 31: 79-83.
- 7. Dou, T., et al. 2004. Isolation and characterization of a Jerky and JRK/JH8 like gene, tigger transposable element derived 7, TIGD7. Biochem. Genet. 42: 279-285.
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CHROMOSOMAL LOCATION

Genetic locus: TIGD1 (human) mapping to 2g37.1.

RESEARCH USE

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

SOURCE

TIGD1 (S-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of TIGD1 of human origin.

PRODUCT

Each vial contains 200 µg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-137845 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

TIGD1 (S-12) is recommended for detection of TIGD1 of 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other TIGD family members.

Suitable for use as control antibody for TIGD1 siRNA (h): sc-94579, TIGD1 shRNA Plasmid (h): sc-94579-SH and TIGD1 shRNA (h) Lentiviral Particles: sc-94579-V.

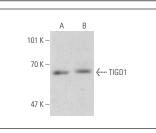
Molecular Weight of TIGD1: 67 kDa.

Positive Controls: K-562 nuclear extract: sc-2130.

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.

DATA



TIGD1 (S-12): sc-137845. Western blot analysis of TIGD1 expression in 293TN whole cell lysate (A) and K-562 nuclear extract (B)

STORAGE

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