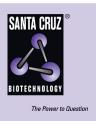
SANTA CRUZ BIOTECHNOLOGY, INC.

FAM184B (E-20): sc-246661



BACKGROUND

FAM184B is a 1,060 amino acid protein that is encoded by a gene that maps to human chromosome 4, that 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 on 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. Chromosome 4 reportedly contains the largest gene deserts (regions of the genome with no protein encoding genes) and has one of the two lowest recombination frequencies of the human chromosomes.

REFERENCES

- Hillier, L.W., et al. 2005. Generation and annotation of the DNA sequences of human chromosomes 2 and 4. Nature 434: 724-731.
- Cowan, C.M. and Raymond, L.A. 2006. Selective neuronal degeneration in Huntington's disease. Curr. Top. Dev. Biol. 75: 25-71.
- Chandler, R.J., et al. 2007. Metabolic phenotype of methylmalonic acidemia in mice and humans: the role of skeletal muscle. BMC Med. Genet. 8: 64.
- Cunningham, M.L., et al. 2007. Syndromic craniosynostosis: from history to hydrogen bonds. Orthod. Craniofac. Res. 10: 67-81.
- 5. de Frutos, C.A., et al. 2007. Snail1 is a transcriptional effector of FGFR-3 signaling during chondrogenesis and achondroplasias. Dev. Cell 13: 872-883.
- Doherty, E.S., et al. 2007. Muenke syndrome (FGFR-3-related craniosynostosis): expansion of the phenotype and review of the literature. Am. J. Med. Genet. A 143: 3204-3215.

CHROMOSOMAL LOCATION

Genetic locus: FAM184B (human) mapping to 4p15.32; Fam184b (mouse) mapping to 5 B3.

SOURCE

FAM184B (E-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of FAM184B 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-246661 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, **D0 NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

FAM184B (E-20) is recommended for detection of FAM184B of mouse and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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 FAM184A.

FAM184B (E-20) is also recommended for detection of FAM184B in additional species, including equine, canine and bovine.

Suitable for use as control antibody for FAM184B siRNA (h): sc-88874, FAM184B siRNA (m): sc-146453, FAM184B shRNA Plasmid (h): sc-88874-SH, FAM184B shRNA Plasmid (m): sc-146453-SH, FAM184B shRNA (h) Lentiviral Particles: sc-88874-V and FAM184B shRNA (m) Lentiviral Particles: sc-146453-V.

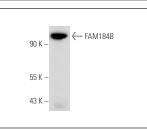
Molecular Weight of FAM184B: 121 kDa.

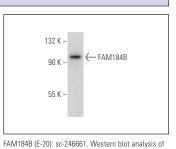
Positive Controls: human skeletal muscle extract: sc-363776 or mouse placenta extract: sc-364247.

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





FAM184B expression in mouse placenta tissue extract.

FAM184B (E-20): sc-246661. Western blot analysis of FAM184B expression in human skeletal muscle tissue extract.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.