

FAM44A (E-10): sc-515761

BACKGROUND

Representing approximately 6% of the human genome, chromosome 4 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., et al. 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.
- 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.
- Ruiz-Perez, V.L., et al. 2007. EVC is a positive mediator of *Ihh*-regulated bone growth that localises at the base of chondrocyte cilia. *Development* 134: 2903-2912.

CHROMOSOMAL LOCATION

Genetic locus: BOD1L1 (human) mapping to 4p15.33.

SOURCE

FAM44A (E-10) is a mouse monoclonal antibody raised against amino acids 466-530 mapping within an internal region of FAM44A of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2a} in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

FAM44A (E-10) is available conjugated to agarose (sc-515761 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-515761 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-515761 PE), fluorescein (sc-515761 FITC), Alexa Fluor[®] 488 (sc-515761 AF488), Alexa Fluor[®] 546 (sc-515761 AF546), Alexa Fluor[®] 594 (sc-515761 AF594) or Alexa Fluor[®] 647 (sc-515761 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-515761 AF680) or Alexa Fluor[®] 790 (sc-515761 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

FAM44A (E-10) is recommended for detection of FAM44A of human origin by Western Blotting (starting dilution 1:100, 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).

Suitable for use as control antibody for FAM44A siRNA (h): sc-88933, FAM44A shRNA Plasmid (h): sc-88933-SH and FAM44A shRNA (h) Lentiviral Particles: sc-88933-V.

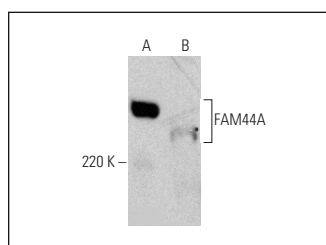
Molecular Weight of FAM44A: 330 kDa.

Positive Controls: U-251-MG whole cell lysate: sc-364176 or HeLa nuclear extract: sc-2120.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker[™] Molecular Weight Standards: sc-2035, UltraCruz[®] Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz[®] Mounting Medium: sc-24941 or UltraCruz[®] Hard-set Mounting Medium: sc-359850.

DATA



FAM44A (E-10): sc-515761. Western blot analysis of FAM44A expression in U-251-MG whole cell lysate (A) and HeLa 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.

RESEARCH USE

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

PROTOCOLS

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