

FAM110C (E-20): sc-82143

BACKGROUND

FAM110C (family with sequence similarity 110, member C) is a 321 amino acid protein that localizes to the cytoplasm, the cytoskeleton and the centrosome, and colocalizes with microtubules during interphase. Expressed in stomach, ovary, colon, prostate, trachea, intestine, thyroid and spinal cord tissue, FAM110C is thought to play a role in microtubule organization and proper cell cycle progression. The gene encoding FAM110C maps to human chromosome 2, which houses over 1,400 genes and comprises nearly 8% of the human genome. Harlequin ichthyosis, a rare and morbid skin deformity, is associated with mutations in the ABCA12 gene, while the lipid metabolic disorder, sitosterolemia, is associated with defects in the ABCG5 and ABCG8 genes. Additionally, an extremely rare recessive genetic disorder, Alström syndrome, is caused by mutations in the ALMS1 gene, which maps to chromosome 2.

REFERENCES

1. Ijdo, J.W., et al. 1991. Origin of human chromosome 2: an ancestral telomere-telomere fusion. *Proc. Natl. Acad. Sci. USA* 88: 9051-9055.
2. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 611395. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
3. Hillier, L.W., et al. 2005. Generation and annotation of the DNA sequences of human chromosomes 2 and 4. *Nature* 434: 724-731.
4. Thomas, A.C., et al. 2006. ABCA12 is the major harlequin ichthyosis gene. *J. Invest. Dermatol.* 126: 2408-2413.
5. Akiyama, M., et al. 2007. Compound heterozygous ABCA12 mutations including a novel nonsense mutation underlie harlequin ichthyosis. *Dermatology* 215: 155-159.
6. Hauge, H., et al. 2007. Characterization of the FAM110 gene family. *Genomics* 90: 14-27.

CHROMOSOMAL LOCATION

Genetic locus: FAM110C (human) mapping to 2p25.3; Fam110c (mouse) mapping to 12 A2.

SOURCE

FAM110C (E-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of FAM110C 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-82143 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

FAM110C (E-20) is recommended for detection of FAM110C 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).

Suitable for use as control antibody for FAM110C siRNA (h): sc-77301, FAM110C siRNA (m): sc-77302, FAM110C shRNA Plasmid (h): sc-77301-SH, FAM110C shRNA Plasmid (m): sc-77302-SH, FAM110C shRNA (h) Lentiviral Particles: sc-77301-V and FAM110C shRNA (m) Lentiviral Particles: sc-77302-V.

Molecular Weight (predicted) of FAM110C: 34 kDa.

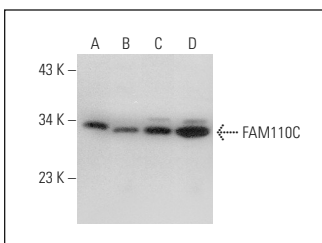
Molecular Weight (observed) of FAM110C: 52 kDa.

Positive Controls: FAM110C (m2): 293T Lysate: sc-120165, HL-60 whole cell lysate: sc-2209 or human tonsil tissue extract: sc-364263.

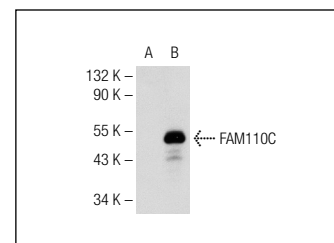
RECOMMENDED SECONDARY REAGENTS

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



FAM110C (E-20): sc-82143. Western blot analysis of FAM110C expression in human stomach (A), human adrenal gland (B) and human tonsil (C) tissue extracts and HL-60 whole cell lysate (D).



FAM110C (E-20): sc-82143. Western blot analysis of FAM110C expression in non-transfected (A) and mouse FAM110C transfected: sc-120165 (B) 293T whole cell lysates.

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.