SANTA CRUZ BIOTECHNOLOGY, INC.

# FAM110C (C-17): sc-82142

SANTA CRUZ BIOTECHNOLOGY

*The Power to Question*

## 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 icthyosis, 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 (C-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus 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-82142 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 (C-17) 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), 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).

FAM110C (C-17) is also recommended for detection of FAM110C in additional species, including canine and bovine.

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.

## 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.

## 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.