SANTA CRUZ BIOTECHNOLOGY, INC.

FAM163A (D-15): sc-163898

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Chromosome 1 is the largest human chromosome spanning about 260 million base pairs and making up 8% of the human genome. There are about 3,000 genes on chromosome 1, and considering the great number of genes there are also a large number of diseases associated with chromosome 1. Notably, the rare aging disease Hutchinson-Gilford progeria is associated with the LMNA gene which encodes lamin A. When defective, the LMNA gene product can build up in the nucleus and cause characteristic nuclear blebs. The mechanism of rapidly enhanced aging is unclear and is a topic of continuing exploration. The MUTYH gene is located on chromosome 1 and is partially responsible for familial adenomatous polyposis. Stickler syndrome, Parkinsons, Gaucher disease and Usher syndrome are also associated with chromosome 1. A breakpoint has been identified in 1q which disrupts the DISC1 gene and is linked to schizophrenia. Aberrations in chromosome 1 are found in a variety of cancers including head and neck cancer, malignant melanoma and multiple myeloma. The FAM163A gene product has been provisionally designated FAM163A pending further characterization.

REFERENCES

1. Watson, M.L., et al. 1990. Genomic organization of the selectin family of leukocyte adhesion molecules on human and mouse chromosome 1. J. Exp. Med. 172: 263-272.
2. Blackwood, D.H., et al. 2001. Schizophrenia and affective disorders—cosegregation with a translocation at chromosome 1q42 that directly disrupts brain-expressed genes: clinical and P300 findings in a family. Am. J. Hum. Genet. 69: 428-433
3. Weise, A., et al. 2005. New insights into the evolution of chromosome 1. Cytogenet. Genome Res. 108: 217-222.
4. Lans, H., et al. 2006. Cell biology: aging nucleus gets out of shape. Nature 440: 32-34.
5. Gregory, S.G., et al. 2006. The DNA sequence and biological annotation of human chromosome 1. Nature 441: 315-321.
6. Hennah, W., et al. 2006. Genes and schizophrenia: beyond schizophrenia: the role of DISC-1 in major mental illness. Schizophr. Bull. 32: 409-416.
7. Marzin, Y., et al. 2006. Chromosome 1 abnormalities in multiple myeloma. Anticancer Res. 26: 953-959.

CHROMOSOMAL LOCATION

Genetic locus: FAM163A (human) mapping to 1q25.2; Fam163a (mouse) mapping to 1 G3.

SOURCE

FAM163A (D-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of FAM163A of human origin.

STORAGE

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

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-163898 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

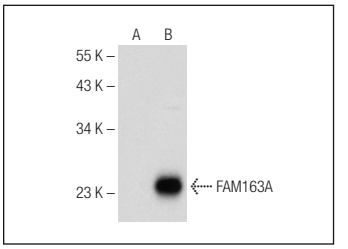
FAM163A (D-15) is recommended for detection of FAM163A of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other C1orf family members.

Suitable for use as control antibody for FAM163A siRNA (h): sc-88530, FAM163A siRNA (m): sc-140624, FAM163A shRNA Plasmid (h): sc-88530-SH, FAM163A shRNA Plasmid (m): sc-140624-SH, FAM163A shRNA (h) Lentiviral Particles: sc-88530-V and FAM163A shRNA (m) Lentiviral Particles: sc-140624-V.

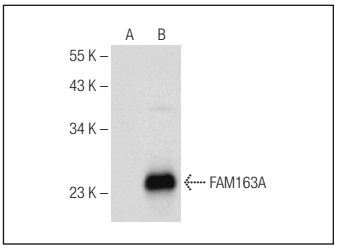
Molecular Weight of FAM163A: 18 kDa.

Positive Controls: FAM163A (h): 293T Lysate: sc-175532.

DATA



FAM163A (D-15): sc-163898. Western blot analysis of FAM163A expression in non-transfected: sc-117752 (**A**) and human FAM163A transfected: sc-175532 (**B**) 293T whole cell lysates.



FAM163A (D-15): sc-163898. Western blot analysis of FAM163A expression in non-transfected: sc-117752 (**A**) and human FAM163A transfected: sc-175533 (**B**) 293T whole cell lysates.

RESEARCH USE

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