SANTA CRUZ BIOTECHNOLOGY, INC.

FAM163A (B-8): sc-390936

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

FAM163A, also known as C1orf76 or NDSP (neuroblastoma-derived secretory protein), is a 167 amino acid single-pass membrane protein that belongs to the FAM163 family. Due to the high expression in neuroblastoma, FAM163A may be used as a maker for metastasis in bone marrow. The gene encoding FAM163A maps to human chromosome 1, which spans 260 million base pairs, contains over 3,000 genes and comprises nearly 8% of the human genome. Chromosome 1 houses a large number of disease-associated genes, including those that are involved in familial adenomatous polyposis, Stickler syndrome, Parkinson's disease, Gaucher disease, schizophrenia and Usher syndrome. Aberrations in chromosome 1 are found in a variety of cancers, including head and neck cancer, malignant melanoma and multiple myeloma.

REFERENCES

1. Eudy, J.D., et al. 1998. Mutation of a gene encoding a protein with extracellular matrix motifs in Usher syndrome type IIa. Science 280: 1753-1757.
2. Tayebi, N., et al. 2001. Gaucher disease and parkinsonism: a phenotypic and genotypic characterization. Mol. Genet. Metab. 73: 313-321.
3. Plasilova, M., et al. 2004. Exclusion of an extracolonic disease modifier locus on chromosome 1p33-36 in a large Swiss familial adenomatous polyposis kindred. Eur. J. Hum. Genet. 12: 365-371.
4. Vasudevan, S.A., et al. 2007. Neuroblastoma-derived secretory protein messenger RNA levels correlate with high-risk neuroblastoma. J. Pediatr. Surg. 42: 148-152.
5. Betarbet, R., et al. 2008. FAS-associated factor 1 and Parkinson's disease. Neurobiol. Dis. 31: 309-315.
6. Holliday, E.G., et al. 2009. Strong evidence for a novel schizophrenia risk locus on chromosome 1p31.1 in homogeneous pedigrees from Tamil Nadu, India. Am. J. Psychiatry 166: 206-215.

CHROMOSOMAL LOCATION

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

SOURCE

FAM163A (B-8) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 105-134 near the C-terminus of FAM163A of human origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-390936 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

STORAGE

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

APPLICATIONS

FAM163A (B-8) is recommended for detection of FAM163A of mouse, rat and 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).

FAM163A (B-8) is also recommended for detection of FAM163A in additional species, including equine and bovine.

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.

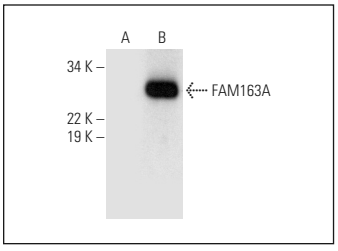
Molecular Weight of FAM163A: 18 kDa.

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

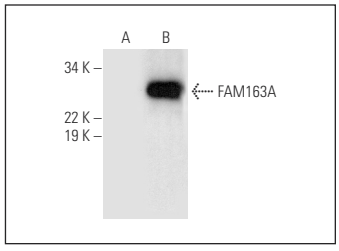
RECOMMENDED SUPPORT REAGENTS

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



FAM163A (B-8): sc-390936. Western blot analysis of FAM163A expression in non-transfected: sc-117752 (**A**) and human FAM163A transfected: sc-175532 (**B**) 293T whole cell lysates.



FAM163A (B-8): sc-390936. Western blot analysis of FAM163A expression in non-transfected: sc-117752 (**A**) and human FAM163A transfected: sc-175533 (**B**) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

1. Liu, N., et al. 2019. FAM163A, a positive regulator of ERK signaling pathway, interacts with 14-3-3β and promotes cell proliferation in squamous cell lung carcinoma. Onco Targets Ther. 12: 6393-6406.

RESEARCH USE

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