SANTA CRUZ BIOTECHNOLOGY, INC.

RUNX1 (C-19): sc-8564

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The mammalian Runt-related transcription factor (RUNX) family comprises three members, RUNX1 (also designated AML-1, PEBP2αB, CBFA2), RUNX2 (also designated AML-3, PEBP2αA, CBFA1, Osf2) and RUNX3 (also designated AML-2, PEBPαC, CBFA3). RUNX family members are DNA-binding proteins that regulate the expression of genes involved in cellular differentiation and cell cycle progression. RUNX1 is involved in hematopoiesis and is frequently targeted in human leukemia by chromosomal translocations that fuse the DNA-binding domain of RUNX1 to other transcription factors and corepressor molecules. In addition to its role in leukemogenesis, RUNX1 is also involved in sensory neuron diversification. Specifically, RUNX1 promotes axonal growth, is selectively expressed in neural crest-derived TrkA+ sensory neurons and mediates TrkA transactivation in migratory neural crest cells. Alternative splicing gives rise to several isoforms of RUNX1.

SOURCE

RUNX1 (C-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of RUNX1 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-8564 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-8564 X, 200 µg/0.1 ml.

APPLICATIONS

RUNX1 (C-19) is recommended for detection of a broad range of RUNX1 (Runt-related transcription factor 1) isoforms 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

RUNX1 (C-19) is also recommended for detection of a broad range of RUNX1 (Runt-related transcription factor 1) isoforms in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for RUNX1 siRNA (h): sc-37677, RUNX1 siRNA (m): sc-37678, RUNX1 shRNA Plasmid (h): sc-37677-SH, RUNX1 shRNA Plasmid (m): sc-37678-SH, RUNX1 shRNA (h) Lentiviral Particles: sc-37677-V and RUNX1 shRNA (m) Lentiviral Particles: sc-37678-V.

RUNX1 (C-19) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of RUNX1: 20-52 kDa.

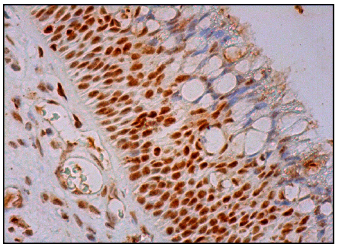
STORAGE

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.

DATA



RUNX1 (C-19): sc-8564. Immunoperoxidase staining of formalin fixed, paraffin-embedded human nasopharynx tissue showing nuclear staining of respiratory epithelial cells.

SELECT PRODUCT CITATIONS

1. Ortiz, B.D., et al. 2001. Function and factor interactions of a locus control region element in the mouse T cell receptor-α/Dad1 gene locus. J. Immunol. 167: 3836-3845.
2. Gattenlohner, S., et al. 2003. NCAM(CD56) and RUNX1(AML1) are up-regulated in human ischemic cardiomyopathy and a rat model of chronic cardiac ischemia. Am. J. Pathol. 163: 1081-1090.
3. Tokuhiro, S., et al. 2003. An intronic SNP in a RUNX1 binding site of SLC22A4, encoding an organic cation transporter, is associated with rheumatoid arthritis. Nat. Genet. 35: 341-348.
4. Lausen, J., et al. 2006. ELA2 is regulated by hematopoietic transcription factors, but not repressed by AML1-ETO. Oncogene 25: 1349-1357.
5. Jalagadugula, G., et al. 2010. Regulation of platelet myosin light chain (MYL9) by RUNX1: implications for thrombocytopenia and platelet dysfunction in RUNX1 haplodeficiency. Blood 116: 6037-6045.
6. Oakford, P.C., et al. 2010. Transcriptional and epigenetic regulation of the GM-CSF promoter by RUNX1. Leuk. Res. 34: 1203-1213.
7. Jalagadugula, G., et al. 2011. Platelet protein kinase C-θ deficiency with human RUNX1 mutation: PRKCQ is a transcriptional target of RUNX1. Arterioscler. Thromb. Vasc. Biol. 31: 921-927.

PROTOCOLS

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

MONOS Satisfaction Guaranteed

Try **RUNX1 (A-2): sc-365644** or **RUNX1 (DW71): sc-101146**, our highly recommended monoclonal alternatives to RUNX1 (C-19). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **RUNX1 (A-2): sc-365644**.