**BACKGROUND**

The mammalian Run-related transcription factor (RUNX) family comprises three members, RUNX1 (also designated AML-1, PEBP2βB, CBFA2), RUNX2 (also designated AML-3, PEBP2αA, CBFA1, Osf2) and RUNX3 (also designated AML-2, PEBP2αC, 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 co-repressor 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 Trk A+ sensory neurons and mediates Trk A transactivation in migratory neural crest cells. Alternative splicing gives rise to several isoforms of RUNX1.

**CHROMOSOMAL LOCATION**

Genetic locus: RUNX1 (human) mapping to 21q22.12; Runx1 (mouse) mapping to 16 C4.

**SOURCE**

RUNX1 (DW71) is a mouse monoclonal antibody raised against recombinant RUNX1 of human origin.

**PRODUCT**

Each vial contains 100 μg IgG2b kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

**APPLICATIONS**

RUNX1 (DW71) is recommended for detection of a broad range of RUNX1 isoforms of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1,000), 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), 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 1:30-1,300).

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.

Molecular Weight of RUNX1 isoforms: 20-52 kDa.

Positive Controls: HL-60 nuclear extract: sc-2147, HeLa nuclear extract: sc-2120 or U-937 nuclear extract: sc-2156.

**STORAGE**

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

**PROTOCOLS**

See our website at www.scbt.com for detailed protocols and support products.