

## RUNX1 Antibody

*RUNX1: Runt-related transcription factor 1, AML1, AMLCR1, CBFA2, EVI-1*

**CATALOG No.: 5149**

### Background:

RUNX1 is one of three mammalian RUNX genes that control multiple aspects of embryonic development and are responsible for the pathogenesis of many human diseases (reviewed in 1). RUNX1 plays major roles in the development of nociceptive sensory neurons (2) in addition to hematopoietic stem cells (HSC) with the exception of the erythroid lineage (3). During development, Notch signals mediate RUNX1 induction with SCL/GATA/Ets factors, and Wnt signals potentially cooperate with RUNX1 to facilitate adult HSC expansion via cooperative induction of cyclin D, cdk4, and other cell cycle regulators (4,5). In turn, RUNX1 regulates cell cycle transitions dependent on functional/physical interactions with other proteins such as HDAC1 and -3, mSin3A, p300, SMAD proteins, and LEF/TCF (5).

### SOURCE:

Rabbit polyclonal RUNX1 antibody was raised against a 16 amino acid peptide from near the center of human RUNX1 (GenBank accession no. AAI36381).

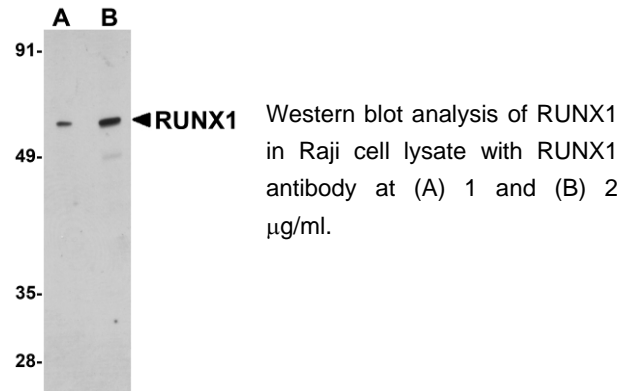
### APPLICATION:

RUNX1 antibody can be used for detection of RUNX1 by Western blot at 1 - 2  $\mu$ g/ml. (Optimal dilution should be determined by user.) Raji cell lysate can be used as positive control. RUNX1 antibody is human, mouse and rat reactive.

**For research use only.**

### STORAGE:

RUNX1 antibody is supplied as immunoaffinity purified IgG in PBS containing 0.02% sodium azide. Store at 4°C, stable for one year.



### RELATED PRODUCTS:

Blocking Peptide, Catalog No. **5149P**.  
Raji Cell Lysate, Catalog No. **1207**.  
Wnt10a Antibody, Catalog No. **4639**.

### REFERENCES:

1. Lund AH and van Lohuizen M. RUNX: a trilogy of cancer genes. *Cancer Cell* 2002; 1:213-5.
2. Inoue K, Shiga T, and Ito Y. Runx transcription factors in neuronal development. *Neur. Dev.* 2008; 3:20.
3. North TE, Stacy T, Matheny CJ, et al. Runx1 is expressed in adult mouse hematopoietic stem cells and differentiating myeloid and lymphoid cells, but not in maturing erythroid cells. *Stem Cells* 2004; 22:158-68.
4. Lee TI, Jenner RG, Boyer LA. Control of developmental regulators by Polycomb in human embryonic stem cells. *Cell* 2006; 125:301-13.
5. Friedman AD. Cell cycle and developmental control of hematopoiesis by Runx1. *J. Cell. Phys.* 2009; 219:520-4. (09-01D)