

Anti-RUNX1 (pS249) Antibody

Rabbit polyclonal antibody to RUNX1 (pS249) Catalog # AP61139

Specification

Anti-RUNX1 (pS249) Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Calculated MW WB <u>Q01196</u> <u>Q03347</u> Human, Mouse, Rat Rabbit Polyclonal 48737

Anti-RUNX1 (pS249) Antibody - Additional Information

Gene ID 861

Other Names

AML1; CBFA2; Runt-related transcription factor 1; Acute myeloid leukemia 1 protein; Core-binding factor subunit alpha-2; CBF-alpha-2; Oncogene AML-1; Polyomavirus enhancer-binding protein 2 alpha B subunit; PEA2-alpha B; PEBP2-alpha B; SL3-3 enhancer factor 1 alpha B subunit; SL3/AKV core-binding factor alpha B subunit

Target/Specificity Recognizes endogenous levels of RUNX1 (pS249) protein.

Dilution WB~~WB (1/500 - 1/1000)

Format

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

Storage

Store at -20 °C.Stable for 12 months from date of receipt

Anti-RUNX1 (pS249) Antibody - Protein Information

Name RUNX1

Synonyms AML1, CBFA2

Function

Forms the heterodimeric complex core-binding factor (CBF) with CBFB. RUNX members modulate the transcription of their target genes through recognizing the core consensus binding sequence 5'- TGTGGT-3', or very rarely, 5'-TGCGGT-3', within their regulatory regions via their runt domain, while CBFB is a non-DNA-binding regulatory subunit that allosterically enhances the



sequence-specific DNA-binding capacity of RUNX. The heterodimers bind to the core site of a number of enhancers and promoters, including murine leukemia virus, polyomavirus enhancer, T-cell receptor enhancers, LCK, IL3 and GM-CSF promoters (Probable). Essential for the development of normal hematopoiesis (PubMed:17431401). Acts synergistically with ELF4 to transactivate the IL-3 promoter and with ELF2 to transactivate the BLK promoter (PubMed:10207087, PubMed:14970218). Inhibits KAT6B-dependent transcriptional activation (By similarity). Involved in lineage commitment of immature T cell precursors. CBF complexes repress ZBTB7B transcription factor during cytotoxic (CD8+) T cell development. They bind to RUNX-binding sequence within the ZBTB7B locus acting as transcriptional silencer and allowing for cytotoxic T cell differentiation. CBF complexes binding to the transcriptional silencer is essential for recruitment of nuclear protein complexes that catalyze epigenetic modifications to establish epigenetic ZBTB7B silencing (By similarity). Controls the anergy and suppressive function of regulatory T-cells (Treg) by associating with FOXP3. Activates the expression of IL2 and IFNG and down-regulates the expression of TNFRSF18, IL2RA and CTLA4, in conventional T-cells (PubMed:17377532). Positively regulates the expression of RORC in T-helper 17 cells (By similarity).

Cellular Location Nucleus.

Tissue Location

Expressed in all tissues examined except brain and heart. Highest levels in thymus, bone marrow and peripheral blood

Anti-RUNX1 (pS249) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-RUNX1 (pS249) Antibody - Images





Western blot analysis of RUNX1 (pS249) expression in Jurkat (A) whole cell lysates.

Anti-RUNX1 (pS249) Antibody - Background

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human RUNX1 (pS249). The exact sequence is proprietary.