

RUNX1 Polyclonal Antibody

Catalog # AP72374

Product Information

Application	WB, IHC-P
Primary Accession	Q01196
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	48737

Additional Information

Gene ID	861
Other Names	RUNX1; 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
Dilution	WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/40000. Not yet tested in other applications. IHC-P~~N/A
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20°C

Protein Information

Name	RUNX1
Synonyms	AML1, CBFA2
Function	Forms the heterodimeric complex core-binding factor (CBF) with CBFβ. 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 CBFβ 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.

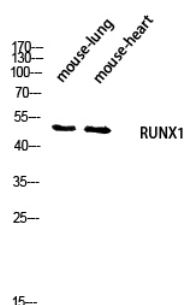
Tissue Location

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

Background

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Images



Western blot analysis of mouse-lung mouse-heart lysis using RUNX1 antibody. Antibody was diluted at 1:1000 cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit (SC-003, Invent biotech, MN, USA).

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