

Anti-RUNX3 Antibody

Catalog # ABO11419

Product Information

Application	WB
Primary Accession	Q64131
Host	Rabbit
Reactivity	Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Runt-related transcription factor 3(RUNX3) detection. Tested with WB in Mouse;Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	12399
Other Names	Runt-related transcription factor 3, Acute myeloid leukemia 2 protein, Core-binding factor subunit alpha-3, CBF-alpha-3, Oncogene AML-2, Polyomavirus enhancer-binding protein 2 alpha C subunit, PEA2-alpha C, PEBP2-alpha C, SL3-3 enhancer factor 1 alpha C subunit, SL3/AKV core-binding factor alpha C subunit, Runx3, Aml2, Cbfa3, Pebp2a3
Calculated MW	43518
Application Details	Western blot, 0.1-0.5 µg/ml, Mouse, Rat
Subcellular Localization	Nucleus. Cytoplasm . The tyrosine phosphorylated form localizes to the cytoplasm. .
Source	Eukaryota
Protein Name	Runt-related transcription factor 3
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg Thimerosal, 0.05mg Na ₃ .
Immunogen	A synthetic peptide corresponding to a sequence in the middle region of mouse RUNX3(186-205aa QKIEDQTKAFPDRFGDLRMR), identical to the related rat sequence.
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins

Storage	At -20 °C for one year. After reconstitution, at 4 °C for one month. It can also be aliquotted and stored frozen at -20 °C for a longer time. Avoid repeated freezing and thawing.
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Protein Information

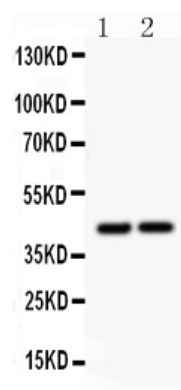
Name	Runx3
Synonyms	Aml2, Cbfa3, Pebp2a3
Function	Forms the heterodimeric complex core-binding factor (CBF) with CBFβ. RUNX members modulate the transcription of their target genes through recognizing the core consensus binding sequence 5'- TGTGGT-3', or very rarely, 5'-TGCGGT-3', within their regulatory 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). May be involved in the control of cellular proliferation and/or differentiation. In association with ZFH3, up-regulates CDKN1A promoter activity following TGF-β stimulation (By similarity). 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 (PubMed: 18258917). CBF complexes binding to the transcriptional silencer is essential for recruitment of nuclear protein complexes that catalyze epigenetic modifications to establish epigenetic ZBTB7B silencing (PubMed: 23481257). Necessary for the development and survival of sensory neurons expressing parvalbumin (PubMed: 39919739).
Cellular Location	Nucleus {ECO:0000250 UniProtKB:Q13761}. Cytoplasm {ECO:0000250 UniProtKB:Q13761}. Note=The tyrosine phosphorylated form localizes to the cytoplasm. Translocates from the cytoplasm to the nucleus following TGF-β stimulation. {ECO:0000250 UniProtKB:Q13761}

Background

Runt-related transcription factor 3, also called AML2 is a protein that in humans is encoded by the RUNX3 gene. The RUNX3 gene encodes a Runt-related transcription factor, which is part of the RUNX gene family. By fluorescence in situ hybridization, RUNX3 was assigned to human chromosome 1p36.11. RUNX3 binds to the core site of murine Leukemia virus, the core sequences in the enhancer of the polyomavirus, and also to the enhancers of the T-cell receptor genes. It may be involved in the control of cellular proliferation and/or differentiation.

Images

Anti- RUNX3 antibody, ABO11419, Western blotting
 All lanes: Anti RUNX3 (ABO11419) at 0.5ug/mL
 Lane 1: Rat Liver Tissue Lysate at 50ug
 Lane 2: Mouse Liver Tissue Lysate at 50ug
 Predicted bind size: 44KD
 Observed bind size: 44KD



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.