10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-RUNX2 Picoband Antibody

Catalog # ABO11855

Product Information

Application	WB
Primary Accession	Q13950
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Runt-related transcription factor 2(RUNX2) detection. Tested with WB in Human.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	860
Other Names	Runt-related transcription factor 2, Acute myeloid leukemia 3 protein, Core-binding factor subunit alpha-1, CBF-alpha-1, Oncogene AML-3, Osteoblast-specific transcription factor 2, OSF-2, Polyomavirus enhancer-binding protein 2 alpha A subunit, PEA2-alpha A, PEBP2-alpha A, SL3-3 enhancer factor 1 alpha A subunit, SL3/AKV core-binding factor alpha A subunit, RUNX2, AML3, CBFA1, OSF2, PEBP2A
Calculated MW	56648
Application Details	Western blot, 0.1-0.5 □g/ml, Human
Subcellular Localization	Nucleus.
Tissue Specificity	Specifically expressed in osteoblasts.
Source	Eukaryota
Protein Name	Runt-related transcription factor 2
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Immunogen	A synthetic peptide corresponding to a sequence in the middle region of human RUNX2(244-278aa DRLSDLGRIPHPSMRVGVPPQNPRPSLNSAPSPFN), identical to the related mouse sequence.
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins

Storage	At -20˚C for one year. After r˚Constitution, 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.
Sequence Similarities	Contains 1 Runt domain.

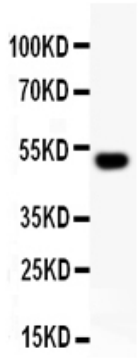
Protein Information

Name	RUNX2
Synonyms	AML3, CBFA1, OSF2, PEBP2A
Function	Transcription factor involved in osteoblastic differentiation and skeletal morphogenesis (PubMed:28505335, PubMed:28703881, PubMed:28738062, PubMed:16299379). Essential for the maturation of osteoblasts and both intramembranous and endochondral ossification. CBF binds to the core site, 5'-PYGPYGGT-3', of a number of enhancers and promoters, including murine leukemia virus, polyomavirus enhancer, T- cell receptor enhancers, osteocalcin, osteopontin, bone sialoprotein, alpha 1(I) collagen, LCK, IL-3 and GM-CSF promoters. In osteoblasts, supports transcription activation: synergizes with SPEN/MINT to enhance FGFR2-mediated activation of the osteocalcin FGF-responsive element (OCFRE) (By similarity). Inhibits KAT6B-dependent transcriptional activation.
Cellular Location	Nucleus. Cytoplasm {ECO:0000250|UniProtKB:Q08775}
Tissue Location	Specifically expressed in osteoblasts.

Background

Core binding factor A1 (CBFA1/RUNX2) is a runt-like transcription factor essential for osteoblast differentiation. This protein is a member of the RUNX family of transcription factors and has a Runt DNA-binding domain. It is essential for osteoblastic differentiation and skeletal morphogenesis and acts as a scaffold for nucleic acids and regulatory factors involved in skeletal gene expression. RUNX2 plays a non-redundant role for Cbfa1 in tooth development that may be distinct from that in bone formation. In odontogenesis, RUNX2 is not involved in the early signaling networks regulating tooth initiation and early morphogenesis but regulates key epithelial-mesenchymal interactions that control advancing morphogenesis and histodifferentiation of the epithelial enamel organ.

Images



Anti-RUNX2 Picoband antibody, ABO11855-1.jpgAll lanes: Anti RUNX2 (ABO11855) at 0.5ug/mlWB: Recombinant Human RUNX2 Protein 0.5ngPredicted bind size: 50KDObserved bind size: 50KD

Anti-RUNX2 Picoband antibody, ABO11855-2.jpgAll lanes: Anti RUNX2 (ABO11855) at 0.5ug/mlLane 1: HELA Whole



Cell Lysate at 40ugLane 2: A431 Whole Cell Lysate at 40ugLane 3: K562 Whole Cell Lysate at 40ugLane 4: JURKAT Whole Cell Lysate at 40ugPredicted bind size: 56KD Observed bind size: 62KD

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