

Anti-RUNX2 Antibody
Catalog # ABO10602**Specification****Anti-RUNX2 Antibody - Product Information**

Application	WB
Primary Accession	Q13950
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Runt-related transcription factor 2(RUNX2) detection. Tested with WB in Human;Mouse;Rat.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-RUNX2 Antibody - 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 MW KDa

Application Details

Western blot, 0.1-0.5 µg/ml, Human, Rat, Mouse

Subcellular Localization

Nucleus.

Tissue Specificity

Specifically expressed in osteoblasts.

Protein Name

Runt-related transcription factor 2

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg Thimerosal, 0.05mg NaN₃.

Immunogen

A synthetic peptide corresponding to a sequence in the middle region of human RUNX2(244-258aa

DRLSDLGRIPHPMSR), identical to the related rat and mouse sequences.

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.

Sequence Similarities

Contains 1 Runt domain.

Anti-RUNX2 Antibody - 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). 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

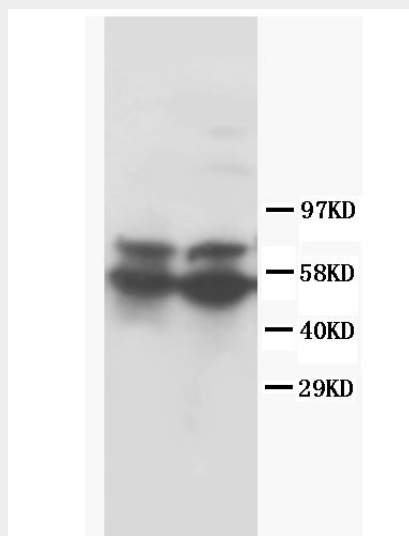
Specifically expressed in osteoblasts.

Anti-RUNX2 Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-RUNX2 Antibody - Images



Anti-RUNX2 antibody, ABO10602, Western blotting Lane 1: Rat Thymus Tissue Lysate Lane 2: Rat Testis Tissue Lysate

Anti-RUNX2 Antibody - 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. D'Souza et al. (1999) indicate a non-redundant role for Cbfa1 in tooth development that may be distinct from that in bone formation. In odontogenesis, Cbfa1 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.