

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

Application	WB
Primary Accession	<a href="#">Q13950</a>
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 Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg Thimerosal, 0.05mg NaN<sub>3</sub>.

**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: <a href="http://www.uniprot.org/citations/28505335" target="\_blank">28505335</a>, PubMed: <a href="http://www.uniprot.org/citations/28703881" target="\_blank">28703881</a>, PubMed: <a href="http://www.uniprot.org/citations/28738062" target="\_blank">28738062</a>). 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**

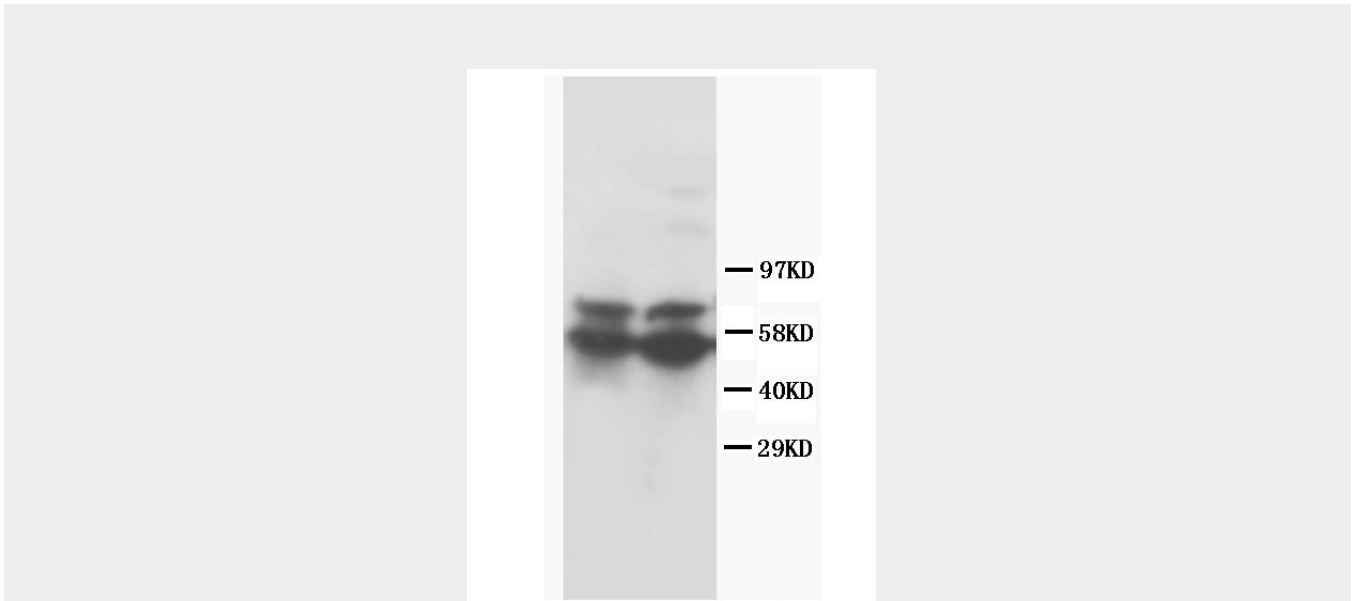
Specifically expressed in osteoblasts.

### **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.