

**RUNX2 Antibody (N-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP7735a**

**Specification**

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**RUNX2 Antibody (N-term) - Product Information**

Application	IHC-P,E
Primary Accession	<a href="#">O13950</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	1-30

**RUNX2 Antibody (N-term) - 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

**Target/Specificity**

This RUNX2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1~30 amino acids from the N-terminal region of human RUNX2.

**Dilution**

IHC-P~~1:10~50

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

RUNX2 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**RUNX2 Antibody (N-term) - 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**

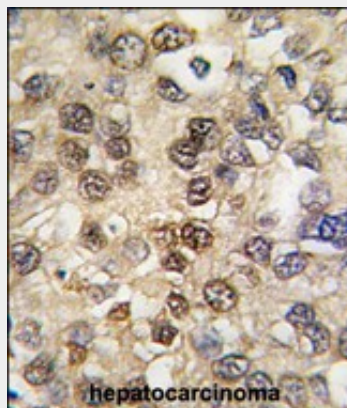
Specifically expressed in osteoblasts.

**RUNX2 Antibody (N-term) - 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](#)

**RUNX2 Antibody (N-term) - Images**



Formalin-fixed and paraffin-embedded human hepatocarcinoma tissue reacted with Runx2 Antibody (N-term) (Cat.#AP7735a), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

**RUNX2 Antibody (N-term) - Background**

Runx2 is a member of the RUNX family of transcription factors. It is a nuclear protein with an Runt

DNA-binding domain. This protein is essential for osteoblastic differentiation and skeletal morphogenesis and acts as a scaffold for nucleic acids and regulatory factors involved in skeletal gene expression. It can bind DNA both as a monomer or, with more affinity, as a subunit of a heterodimeric complex. Mutations in the Runx2 gene have been associated with the bone development disorder cleidocranial dysplasia (CCD).

#### **RUNX2 Antibody (N-term) - References**

Rich, J.T., Biochem. Biophys. Res. Commun. 372 (1), 230-235 (2008)

Ermakov, S., Ann. Hum. Genet. 72 (PT 4), 510-518 (2008)

Endo, T., J. Clin. Endocrinol. Metab. 93 (6), 2409-2412 (2008)

#### **RUNX2 Antibody (N-term) - Citations**

- [CCAAT/enhancer-binding protein  \$\beta\$  regulates the repression of type II collagen expression during the differentiation from proliferative to hypertrophic chondrocytes.](#)