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

RUNX2 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7735a

Specification

RUNX2 Antibody (N-term) - Product Information

Application	**IHC-P,E**
Primary Accession	Q13950
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
E~~Use at an assay dependent concentration.

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}

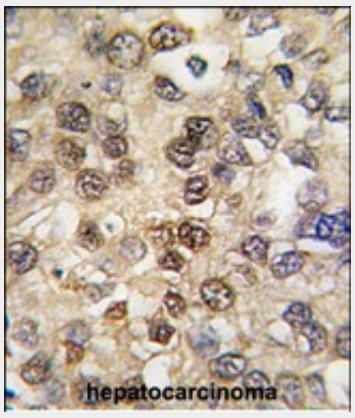
Tissue Location
Specifically expressed in osteoblasts.

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 Cytomety
- 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 β regulates the repression of type II collagen expression during the differentiation from proliferative to hypertrophic chondrocytes.