

**CBFA1 / RUNX2 Antibody (clone 1D2)**  
**Mouse Monoclonal Antibody**  
**Catalog # ALS13286****Specification**

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**CBFA1 / RUNX2 Antibody (clone 1D2) - Product Information**

Application	IF, IHC
Primary Accession	<a href="#">O13950</a>
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Calculated MW	57kDa KDa

**CBFA1 / RUNX2 Antibody (clone 1D2) - 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

**Reconstitution & Storage**

Store at -20°C. Aliquot to avoid freeze/thaw cycles.

**Precautions**

CBFA1 / RUNX2 Antibody (clone 1D2) is for research use only and not for use in diagnostic or therapeutic procedures.

**CBFA1 / RUNX2 Antibody (clone 1D2) - Protein Information****Name** RUNX2**Synonyms** AML3, CBFA1, OSF2, PEBP2A**Function**

Transcription factor involved in osteoblastic differentiation and skeletal morphogenesis (PubMed: [28505335](http://www.uniprot.org/citations/28505335), PubMed: [28703881](http://www.uniprot.org/citations/28703881), PubMed: [28738062](http://www.uniprot.org/citations/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**

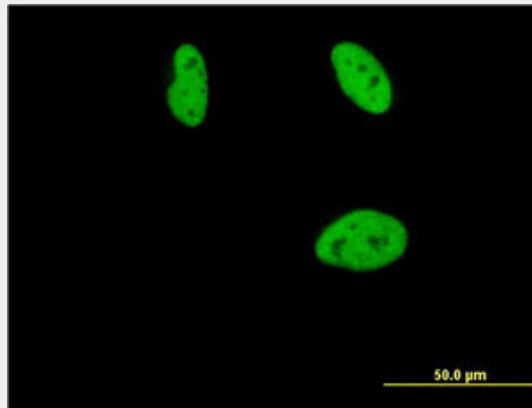
Specifically expressed in osteoblasts.

**CBFA1 / RUNX2 Antibody (clone 1D2) - Protocols**

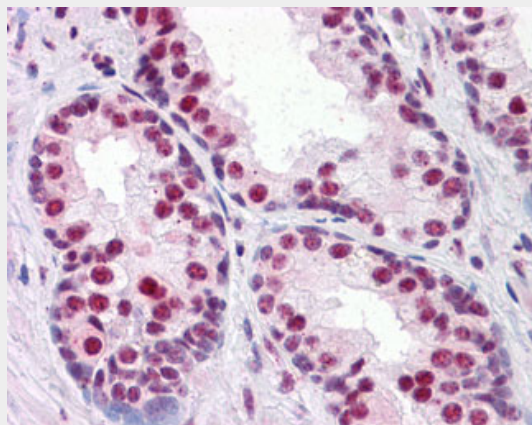
Provided below are standard protocols that you may find useful for product applications.

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

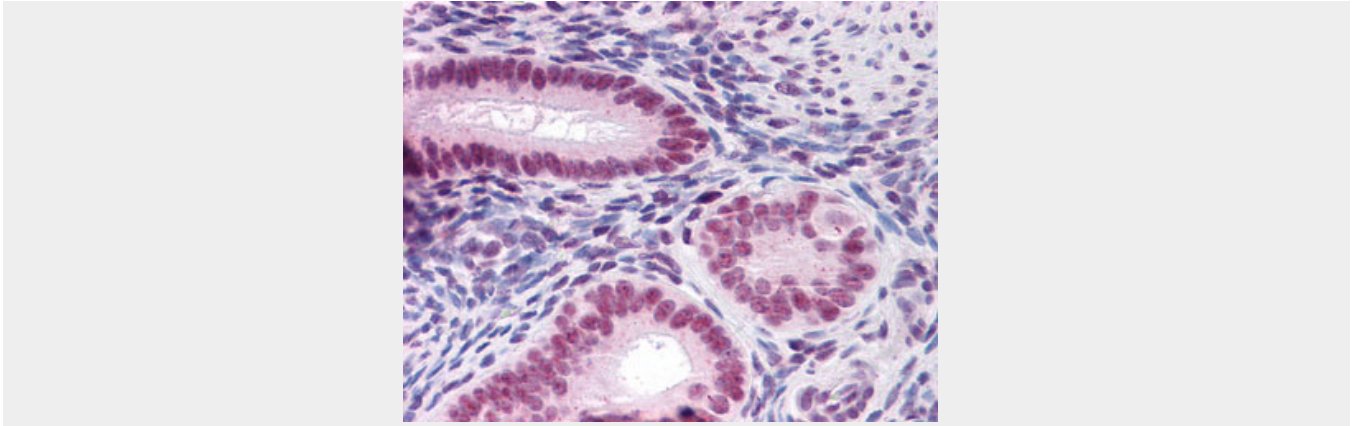
**CBFA1 / RUNX2 Antibody (clone 1D2) - Images**



Immunofluorescence of monoclonal antibody to RUNX2 on HeLa cell (antibody concentration 10 ug/ml).



Anti-RUNX2 antibody IHC of human prostate.



Anti-RUNX2 antibody IHC of human uterus.

### **CBFA1 / RUNX2 Antibody (clone 1D2) - Background**

Transcription factor involved in osteoblastic differentiation and skeletal morphogenesis. 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.

### **CBFA1 / RUNX2 Antibody (clone 1D2) - References**

- Mundlos S.,et al.Cell 89:773-779(1997).
- Geoffroy V.,et al.Mamm. Genome 9:54-57(1998).
- Mungall A.J.,et al.Nature 425:805-811(2003).
- Xiao Z.S.,et al.Gene 214:187-197(1998).
- Zhang Y.-W.,et al.Oncogene 15:367-371(1997).