

# RUNX2 Polyclonal Antibody

Catalog # AP73539

## **Product Information**

| Application       | WB, IF            |
|-------------------|-------------------|
| Primary Accession | <u>Q13950</u>     |
| Reactivity        | Human, Mouse, Rat |
| Host              | Rabbit            |
| Clonality         | Polyclonal        |
| Calculated MW     | 56648             |

### **Additional Information**

| Gene ID            | 860                                                                                                                                                                                                                                                                                                                                                                                                                   |
|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Other Names        | RUNX2; AML3; CBFA1; OSF2; PEBP2A; Runt-related transcription factor 2;<br>Acute myeloid leukemia 3 protein; Core-binding factor subunit alpha-1;<br>CBF-alpha-1; Oncogene AML-3Osteoblast-specific transcription factor 2;<br>OSF-2; Polyomavirus enhancer-binding protein 2 alpha A subunit; PEA2-alpha<br>A; PEBP2-alpha A; SL3-3 enhancer factor 1 alpha A subunit; SL3/AKV<br>core-binding factor alpha A subunit |
| Dilution           | WB~~IF: 1:50-200 Western Blot: 1/500 - 1/2000. ELISA: 1/20000. Not yet tested in other applications. IF~~IF: 1:50-200 Western Blot: 1/500 - 1/2000. ELISA: 1/20000. Not yet tested in other applications.                                                                                                                                                                                                             |
| Format             | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.                                                                                                                                                                                                                                                                                                                                         |
| Storage Conditions | -20°C                                                                                                                                                                                                                                                                                                                                                                                                                 |

#### **Protein Information**

| Name     | RUNX2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Synonyms | AML3, CBFA1, OSF2, PEBP2A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Function | Transcription factor involved in osteoblastic differentiation and skeletal<br>morphogenesis (PubMed: <u>28505335</u> , PubMed: <u>28703881</u> , PubMed: <u>28738062</u> ).<br>Essential for the maturation of osteoblasts and both intramembranous and<br>endochondral ossification. CBF binds to the core site, 5'-PYGPYGGT-3', of a<br>number of enhancers and promoters, including murine leukemia virus,<br>polyomavirus enhancer, T-cell receptor enhancers, osteocalcin, osteopontin,<br>bone sialoprotein, alpha 1(I) collagen, LCK, IL-3 and GM-CSF promoters. In<br>osteoblasts, supports transcription activation: synergizes with SPEN/MINT to<br>enhance FGFR2- mediated activation of the osteocalcin FGF-responsive<br>element (OCFRE) (By similarity). Inhibits KAT6B-dependent transcriptional |

|                   | activation.                                       |
|-------------------|---------------------------------------------------|
| Cellular Location | Nucleus. Cytoplasm {ECO:0000250 UniProtKB:Q08775} |
| Tissue Location   | Specifically expressed in osteoblasts.            |

## Background

Transcription factor involved in osteoblastic differentiation and skeletal morphogenesis (PubMed:<u>28505335</u>, PubMed:<u>28738062</u>, PubMed:<u>28703881</u>). 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.

#### Images



Immunofluorescence analysis of human-stomach tissue. 1,RUNX2 Polyclonal Antibody(red) was diluted at 1:200(4°C,overnight). 2, Cy3 labled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B

Western Blot analysis of K562 cells using RUNX2 Polyclonal Antibody.. Secondary antibody was diluted at 1:20000

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.