

## ARG42738 anti-RUNX2 antibody

Package: 50 µg  
Store at: -20°C

### Summary

Product Description	Rabbit Polyclonal antibody recognizes RUNX2
Tested Reactivity	Hu, Ms, Rat
Predict Reactivity	Hm
Tested Application	WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	RUNX2
Species	Human
Immunogen	Synthetic peptide corresponding to aa. 244-258 of Human RUNX2. (DRLSDLGRIPHPMSMR)
Conjugation	Un-conjugated
Alternate Names	OSF2; Core-binding factor subunit alpha-1; CLCD; AML3; Acute myeloid leukemia 3 protein; Polyomavirus enhancer-binding protein 2 alpha A subunit; CBFA1; SL3/AKV core-binding factor alpha A subunit; PEA2aA; Osteoblast-specific transcription factor 2; SL3-3 enhancer factor 1 alpha A subunit; PEBP2-alpha A; Oncogene AML-3; CBF-alpha-1; CCD; PEBP2aA; CCD1; OSF-2; PEA2-alpha A; Runt-related transcription factor 2

### Application Instructions

Application table	<table> <tr> <th>Application</th><th>Dilution</th></tr> <tr> <td>WB</td><td>1:500 - 1:2000</td></tr> </table>	Application	Dilution	WB	1:500 - 1:2000
Application	Dilution				
WB	1:500 - 1:2000				
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.				
Observed Size	~ 57 kDa				

### Properties

Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	0.2% Na <sub>2</sub> HPO <sub>4</sub> , 0.9% NaCl, 0.05% Thimerosal, 0.05% Sodium azide and 5% BSA.
Preservative	0.05% Thimerosal and 0.05% Sodium azide
Stabilizer	5% BSA
Concentration	0.5 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated

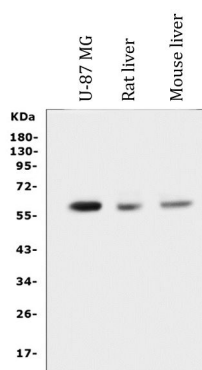
freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

**Note** For laboratory research only, not for drug, diagnostic or other use.

## Bioinformation

Gene Symbol	RUNX2
Gene Full Name	runt-related transcription factor 2
Background	This gene is a member of the RUNX family of transcription factors and encodes 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. The protein can bind DNA both as a monomer or, with more affinity, as a subunit of a heterodimeric complex. Two regions of potential trinucleotide repeat expansions are present in the N-terminal region of the encoded protein, and these and other mutations in this gene have been associated with the bone development disorder cleidocranial dysplasia (CCD). Transcript variants that encode different protein isoforms result from the use of alternate promoters as well as alternate splicing. [provided by RefSeq, Jul 2016]
Function	Transcription factor involved in osteoblastic differentiation and skeletal morphogenesis (PubMed:28505335, PubMed:28738062, PubMed:28703881). 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. [UniProt]
Calculated Mw	57 kDa
PTM	Phosphorylated; probably by MAP kinases (MAPK). Phosphorylation by HIPK3 is required for the SPEN/MINT and FGF2 transactivation during osteoblastic differentiation (By similarity). Phosphorylation at Ser-451 by CDK1 promotes endothelial cell proliferation required for tumor angiogenesis probably by facilitating cell cycle progression. Isoform 3 is phosphorylated on Ser-340. [UniProt]
Cellular Localization	Nucleus. [UniProt]

## Images



ARG42738 anti-RUNX2 antibody WB image

Western blot: 50 µg of sample under reducing conditions. U-87 MG, Rat liver and Mouse liver lysates stained with ARG42738 anti-RUNX2 antibody at 0.5 µg/ml dilution, overnight at 4°C.