

## RUNX2 Rabbit mAb

Catalog No: #49158



Package Size: #49158-1 50ul #49158-2 100ul

Orders: [order@signalwayantibody.com](mailto:order@signalwayantibody.com)Support: [tech@signalwayantibody.com](mailto:tech@signalwayantibody.com)

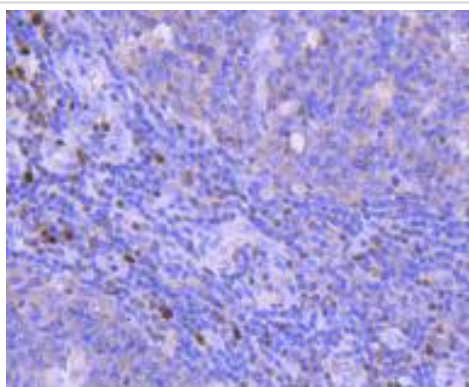
## Description

Product Name	RUNX2 Rabbit mAb
Host Species	Recombinant Rabbit
Clonality	Monoclonal antibody
Purification	Affinity-chromatography
Applications	WB;IHC;ICC/IF
Species Reactivity	Human;Mouse;Rat
Immunogen Description	A synthesized peptide derived from human RUNX2
Conjugates	Unconjugated
Other Names	Acute myeloid leukemia 3 protein antibody Alpha subunit 1 antibody AML3 antibody CBF alpha 1 antibody CBF-alpha-1 antibody CBFA1 antibody CCD antibody CCD1 antibody Cleidocranial dysplasia 1 antibody Core binding factor antibody Core binding factor runt domain alpha subunit 1 antibody Core binding factor subunit alpha 1 antibody Core-binding factor subunit alpha-1 antibody MGC120022 antibody MGC120023 antibody Oncogene AML 3 antibody Oncogene AML-3 antibody OSF 2 antibody OSF-2 antibody OSF2 antibody Osteoblast specific transcription factor 2 antibody Osteoblast-specific transcription factor 2 antibody OTTHUMP00000016533 antibody PEA2 alpha A antibody PEA2-alpha A antibody PEA2aA antibody PEBP2 alpha A antibody PEBP2-alpha A antibody PEBP2A1 antibody PEBP2A2 antibody PEBP2aA antibody PEBP2aA1 antibody Polyomavirus enhancer binding protein 2 alpha A subunit antibody Polyomavirus enhancer-binding protein 2 alpha A subunit antibody Runt domain antibody Runt related transcription factor 2 antibody Runt-related transcription factor 2 antibody RUNX2 antibody RUNX2_HUMAN antibody SL3 3 enhancer factor 1 alpha A subunit antibody SL3-3 enhancer factor 1 alpha A subunit antibody SL3/AKV core binding factor alpha A subunit antibody SL3/AKV core-binding factor alpha A subunit antibody
Accession No.	Swiss-Prot#:Q13950
Formulation	Rabbit IgG in 10mM phosphate buffered saline , pH 7.4, 150mM sodium chloride, 0.05% BSA, 0.02% sodium azide and 50% glycerol.
Storage	Store at +4°C for short term. Store at -20°C for long term. Avoid freeze/thaw cycle.

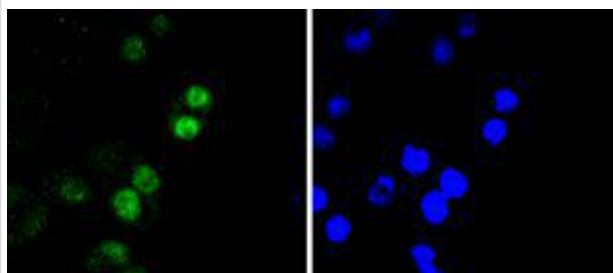
## Application Details

WB 1:1000-1:2000; IHC 1:100-1:200; ICC/IF 1:50-1:200

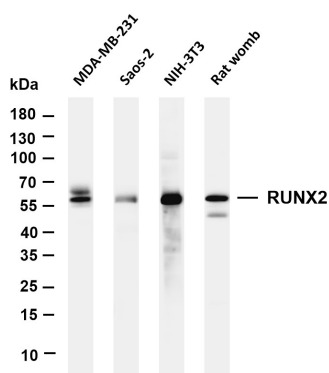
## Images



Immunohistochemical analysis of paraffin-embedded human tonsil tissue using anti-RUNX2 antibody. Counter stained with hematoxylin.



ICC staining RUNX2 in SW480 cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-RUNX2 antibody. The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: MDA-MB-231 Lane 2: Saos-2 Lane 3: NIH-3T3 Lane 4: Rat womb

## Background

The mammalian Runt-related transcription factor (RUNX) family comprises three members, RUNX1 (also designated AML-1, PEBP2αB, CBFA2), RUNX2 (also designated AML-3, PEBP2αA, CBFA1, Osf2) and RUNX3 (also designated AML-2, PEBPαC, CBFA3). RUNX family members are DNA-binding proteins that regulate the expression of genes involved in cellular differentiation and cell cycle progression. RUNX2 is essential for skeletal mineralization in that it stimulates osteoblast differentiation of mesenchymal stem cells, promotes chondrocyte hypertrophy and contributes to endothelial cell migration and vascular invasion of developing bones. Regulating RUNX2 expression may be a useful therapeutic tool for promoting bone formation. Mutations in the C-terminus of RUNX2 are associated with cleidocranial dysplasia syndrome, an autosomal-dominant skeletal dysplasia syndrome that is characterized by widely patent calvarial sutures, clavicular hypoplasia, supernumerary teeth, and short stature.

## References

1. Wang F et al. PTH/SDF-1a cotherapy induces CD90+CD34- stromal cells migration and promotes tissue regeneration in a rat periodontal defect model. *Sci Rep* 6:30403 (2016).
2. Pang J et al. ACVR1-Fc suppresses BMP signaling and chondro-osseous differentiation in an in vitro model of Fibrodysplasia ossificans progressiva. *Bone* 92:29-36 (2016).

## Published Papers

el at., Nanotherapy for bone repair: milk-derived small extracellular vesicles delivery of icariinInDrug Deliv On2023 DecbyXinxin Yu?1,?Ming Dong et al..PMID: 36714914, , (2023)

[PMID:36714914](#)

Shuting Gao;Huihua Li;Zekun Li;Hong Wang;Xinyue Li;Shengyan Yang;Lin Huang;Baoping Zhang;Kailiang Zhang;James Kit Hon Tsoi;Jian He;Waruna Lakmal Dissanayaka el at., Multifunctional Injectable Bioadhesive with Toll-like Receptor 4 and Myeloid Differentiation Factor 2 Antagonistic Anti-inflammatory Potential for Periodontal Regeneration., , (2025)

[PMID:39951685](#)

Note: This product is for in vitro research use only and is not intended for use in humans or animals.