

# ARG42687 anti-RUNX3 antibody

Package: 50 μg Store at: -20°C

# Summary

Product Description	Rabbit Polyclonal antibody recognizes RUNX3
Tested Reactivity	Ms, Rat
Predict Reactivity	Hm
Tested Application	WB
Specificity	This antibody might not cross-react to Human RUNX3 protein.
Host	Rabbit
Clonality	Polyclonal
lsotype	IgG
Target Name	RUNX3
Species	Mouse
Immunogen	Synthetic peptide corresponding to aa. 186-205 of Mouse RUNX3. (QKIEDQTKAFPDRFGDLRMR)
Conjugation	Un-conjugated
Alternate Names	Runt-related transcription factor 3; AML2; Polyomavirus enhancer-binding protein 2 alpha C subunit; CBFA3; SL3/AKV core-binding factor alpha C subunit; Oncogene AML-2; SL3-3 enhancer factor 1 alpha C subunit; PEBP2aC; Core-binding factor subunit alpha-3; CBF-alpha-3; PEA2-alpha C; PEBP2-alpha C; Acute myeloid leukemia 2 protein

# **Application Instructions**

Application table	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	~ 44 kDa		

## Properties

Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	0.2% Na2HPO4, 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	RUNX3
Gene Full Name	runt-related transcription factor 3
Background	This gene encodes a member of the runt domain-containing family of transcription factors. A heterodimer of this protein and a beta subunit forms a complex that binds to the core DNA sequence 5'-PYGPYGGT-3' found in a number of enhancers and promoters, and can either activate or suppress transcription. It also interacts with other transcription factors. It functions as a tumor suppressor, and the gene is frequently deleted or transcriptionally silenced in cancer. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Mar 2016]
Function	Forms the heterodimeric complex core-binding factor (CBF) with CBFB. RUNX members modulate the transcription of their target genes through recognizing the core consensus binding sequence 5'-TGTGGT-3', or very rarely, 5'-TGCGGT-3', within their regulatory regions via their runt domain, while CBFB is a non-DNA-binding regulatory subunit that allosterically enhances the sequence-specific DNA-binding capacity of RUNX. The heterodimers bind to the core site of a number of enhancers and promoters, including murine leukemia virus, polyomavirus enhancer, T-cell receptor enhancers, LCK, IL3 and GM-CSF promoters (By similarity). May be involved in the control of cellular proliferation and/or differentiation. In association with ZFHX3, upregulates CDKN1A promoter activity following TGF-beta stimulation (PubMed:20599712). CBF complexes repress ZBTB7B transcription factor during cytotoxic (CD8+) T cell development. They bind to RUNX-binding sequence within the ZBTB7B locus acting as transcriptional silencer and allowing for cytotoxic T cell differentiation. CBF complexes binding to the transcriptional silencer is essential for recruitment of nuclear protein complexes that catalyze epigenetic modifications to establish epigenetic ZBTB7B silencing (By similarity). [UniProt]
Calculated Mw	44 kDa
РТМ	Phosphorylated on tyrosine residues by SRC. Phosphorylated by LCK and FYN. [UniProt]
Cellular Localization	Nucleus. Cytoplasm. Note=The tyrosine phosphorylated form localizes to the cytoplasm. Translocates from the cytoplasm to the nucleus following TGF-beta stimulation. [UniProt]

Images



#### ARG42687 anti-RUNX3 antibody WB image

Western blot: 50  $\mu g$  of Rat liver and Mouse liver lysates stained with ARG42687 anti-RUNX3 antibody at 0.5  $\mu g/ml$  dilution.