

Rabbit anti-Human, Rat AML1 Polyclonal Antibody | anti-AML1 antibody

Phospho-AML1 (Ser249) Antibody

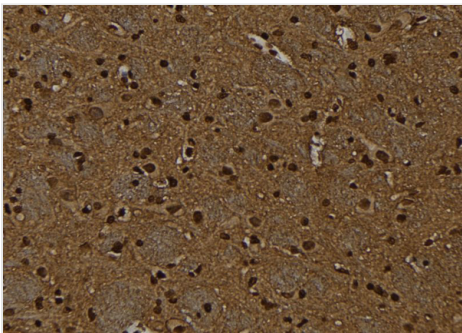
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA321300	Rabbit	Human, Rat	Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

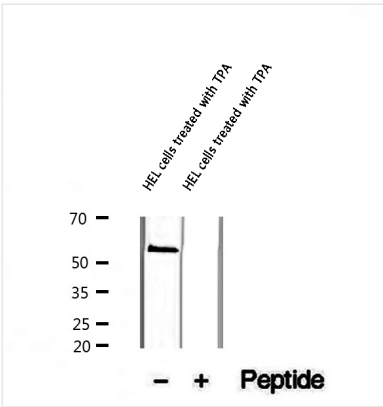
AML1; Polyclonal Antibody; Phospho-AML1 (Ser249) Antibody; Acute myeloid leukemia 1; Acute myeloid leukemia 1 protein; alpha subunit core binding factor; AML 1; AML1 EVI 1; AML1 EVI 1 fusion protein; Aml1 oncogene; AMLCR 1; AMLCR1; CBF alpha 2; CBF-alpha-2; CBFA 2; CBFA2; Core binding factor alpha 2 subunit; Core binding factor runt domain alpha subunit 2; Core-binding factor subunit alpha-2; EVI 1; EVI1; HGNC; Oncogene AML 1; Oncogene AML-1; OTTHUMP00000108696; OTTHUMP00000108697; OTTHUMP00000108699; OTTHUMP00000108700; OTTHUMP00000108702; PEA2 alpha B; PEA2-alpha B; PEBP2 alpha B; PEBP2-alpha B; PEBP2A2; PEBP2aB; Polyomavirus enhancer binding protein 2 alpha B subunit; Polyomavirus enhancer-binding protein 2 alpha B subunit; Run1; Runt related transcription factor 1; Runt-related transcription factor 1; RUNX 1; Runx1; RUNX1_HUMAN; SL3 3 enhancer factor 1 alpha B subunit; SL3-3 enhancer factor 1 alpha B subunit; SL3/AKV core binding factor alpha B subunit; SL3/AKV core-binding factor alpha B subunit; anti-AML1 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	Phospho-AML1 (Ser249) antibody detects endogenous levels of AML1.
Purity/Purification	From purified rabbit serum by affinity purification via sequential chromatography on phospho-and non-phospho-peptide affinity columns.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	453
Applicable Applications for anti-AML1 antibody	IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human AML1 around the phosphorylation site of Ser249.
Subcellular Location	Nucleus.
Tissue Specificity	Expressed in all tissues examined except brain and heart. Highest levels in thymus, bone marrow and peripheral blood.
Predicted Cross Reactivity	Bovine, Horse, Sheep, Rabbit, Dog, Chicken, Xenopus
Similarity	Bovine (100%), Horse (100%), Sheep (100%), Rabbit (100%), Dog (100%), Chicken (92%), Xenopus (83%)
Conjugation	Unconjugated
Epitope	Phospho Ser249
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.



IHC (Immunohistochemistry)
AAA321300 at 1/100 staining Rat brain tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.



WB (Western Blot)
Western blot analysis of extracts of HEL cells treated with TPA, using Phospho-AML1 (Ser249) Antibody.

ADDITIONAL INFORMATION

Related Product Information for anti-AML1 antibody	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 (Probable). Essential for the development of normal hematopoiesis (PubMed:17431401). Acts synergistically with ELF4 to transactivate the IL-3 promoter and with ELF2 to transactivate the BLK promoter (PubMed:10207087, PubMed:14970218). Inhibits KAT6B-dependent transcriptional activation (By similarity). Involved in lineage commitment of immature T cell precursors. 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). Controls the anergy and suppressive function of regulatory T-cells (Treg) by associating with FOXP3. Activates the expression of IL2 and IFNG and down-regulates the expression of TNFRSF18, IL2RA and CTLA4, in conventional T-cells (PubMed:17377532). Positively regulates the expression of RORC in T-helper 17 cells (By similarity). Subunit Structure: Heterodimer with CBFB. RUNX1 binds DNA as a monomer and through the Runt domain. DNA-binding is increased by heterodimerization. Isoform AML-1L can neither bind DNA nor heterodimerize. Interacts with TLE1 and ALYREF/THOC4. Interacts with ELF1, ELF2 and SPI1. Interacts via its Runt domain with the ELF4 N-terminal region. Interaction with ELF2 isoform 2 (NERF-1a) may act to repress RUNX1-mediated transactivation. Interacts with KAT6A and KAT6B. Interacts with SUV39H1, leading to abrogation of transactivating and DNA-binding properties of RUNX1. Interacts with YAP1. Interacts with HIPK2 (By similarity). Interaction with CDK6 prevents myeloid differentiation, reducing its transcription transactivation activity. Found in a complex with PRMT5, RUNX1 AND CBFB. Interacts with FOXP3. Interacts with TBX21 (By similarity). Post-translational Modifications: Phosphorylated in its C-terminus upon IL-6 treatment. Phosphorylation enhances interaction with KAT6A. Methylated. Phosphorylated in Ser-249 Thr-273 and Ser-276 by HIPK2 when associated with CBFB and DNA. This phosphorylation promotes subsequent EP300 phosphorylation. Similarity: A proline/serine/threonine rich region at the C-terminus is necessary for transcriptional activation of target genes.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	49574546
NCBI GeneID	861
NCBI Accession #	NP_001001890.1
NCBI GenBank Nucleotide #	NM_001001890.2

UniProt Accession #	Q01196; O60472; O60473; O76047; O76089; Q13081; Q13755; Q13756; Q13757; A8MV94; B2RMS4; D3DSG1
Molecular Weight	Observed: 55 kDa Predicted: 49 kDa
NCBI Official Full Name	runt-related transcription factor 1 isoform AML1b
NCBI Official Synonym Full Names	runt related transcription factor 1
NCBI Official Symbol	RUNX1
NCBI Official Synonym Symbols	AML1; CBFA2; EVI-1; AMLCR1; PEBP2aB; CBF2alpha; AML1-EVI-1; PEBP2alpha
NCBI Protein Information	runt-related transcription factor 1
UniProt Protein Name	Runt-related transcription factor 1
UniProt Gene Name	RUNX1
UniProt Synonym Gene Names	AML1; CBFA2; CBF-alpha-2; PEA2-alpha B; PEBP2-alpha B

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/aml1-antibody-immunohistochemistry-western-blot-elisa/321300>