



Rabbit Anti-phospho-RUNX1 (Ser276) antibody

SL18969R

Product Name:	phospho-RUNX1 (Ser276)
Chinese Name:	磷酸化急性髓细胞白血病1蛋白抗体
Alias:	RUNX1 / AML1 (phospho S276); p-RUNX1 / AML1 (phospho S276); Runx1 (phospho S276); Acute myeloid leukemia 1 protein; Acute myeloid leukemia protein 1; AML1; AML1 CORE-BINDING FACTOR, RUNT DOMAIN, ALPHA , SUBUNIT 2; AML1-EVI-1; AMLCR1; CBF-alpha-2; CBF-alpha2; CBFA2; Core-binding factor subunit alpha-2; EVI-1; Oncogene AML-1; PEA2-alpha B; PEBP2-alpha B; PEBP2A2; PEBP2aB; Polyomavirus enhancer-binding protein 2 alpha B subunit; Runt-related transcription factor 1; Runx1; RUNX1_HUMAN; SL3-3 enhancer factor 1 alpha B subunit; SL3/AKV core-binding factor alpha B subunit.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Chicken,Sheep,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	49kDa
Cellular localization:	cytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthesised phosphopeptide derived from human RUNX1 around the phosphorylation site of Ser276:PI(p-S)PG
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of

	antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	<p>Core binding factor (CBF) is a heterodimeric transcription factor that binds to the core element of many enhancers and promoters. The protein encoded by this gene represents the alpha subunit of CBF and is thought to be involved in the development of normal hematopoiesis. Chromosomal translocations involving this gene are well-documented and have been associated with several types of leukemia. Three transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]</p> <p>Function: 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, LCK, IL-3 and GM-CSF promoters. The alpha subunit binds DNA and appears to have a role in the development of normal hematopoiesis. Isoform AML-1L interferes with the transactivation activity of RUNX1. Acts synergistically with ELF4 to transactivate the IL-3 promoter and with ELF2 to transactivate the mouse BLK promoter. Inhibits KAT6B-dependent transcriptional activation.</p> <p>Subunit: Heterodimer with CBFβ. 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 CBFβ.</p> <p>Subcellular Location: Nucleus.</p> <p>Tissue Specificity: Expressed in all tissues examined except brain and heart. Highest levels in thymus, bone marrow and peripheral blood.</p> <p>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 CBFβ and DNA. This phosphorylation promotes subsequent EP300 phosphorylation.</p> <p>DISEASE:</p>

A chromosomal aberration involving RUNX1/AML1 is a cause of M2 type acute myeloid leukemia (AML-M2). Translocation t(8;21)(q22;q22) with RUNX1T1. Ref.41 Ref.42 Ref.43 Ref.45 Ref.47

A chromosomal aberration involving RUNX1/AML1 is a cause of therapy-related myelodysplastic syndrome (T-MDS). Translocation t(3;21)(q26;q22) with EAP or MECOM.

A chromosomal aberration involving RUNX1/AML1 is a cause of chronic myelogenous leukemia (CML). Translocation t(3;21)(q26;q22) with EAP or MECOM.

A chromosomal aberration involving RUNX1/AML1 is found in childhood acute lymphoblastic leukemia (ALL). Translocation t(12;21)(p13;q22) with TEL. The translocation fuses the 3'-end of TEL to the alternate 5'-exon of AML-1H.

A chromosomal aberration involving RUNX1 is found in acute leukemia. Translocation t(11;21)(q13;q22) that forms a MACROD1-RUNX1 fusion protein.

Familial platelet disorder with associated myeloid malignancy (FPDMM) [MIM:601399]: Autosomal dominant disease characterized by qualitative and quantitative platelet defects, and propensity to develop acute myelogenous leukemia. Note: The disease is caused by mutations affecting the gene represented in this entry. Ref.49

A chromosomal aberration involving RUNX1/AML1 is found in therapy-related myeloid malignancies. Translocation t(16;21)(q24;q22) that forms a RUNX1-CBFA2T3 fusion protein.

A chromosomal aberration involving RUNX1/AML1 is a cause of chronic myelomonocytic leukemia. Inversion inv21(q21;q22) with USP16.

Similarity:

Contains 1 Runt domain.

SWISS:

Q01196

Gene ID:

861

Database links:

[Entrez Gene: 861](#) Human

[Entrez Gene: 12394](#) Mouse

[Entrez Gene: 50662](#) Rat

[Omim: 151385](#) Human

[SwissProt: Q01196](#) Human

[SwissProt: Q03347](#) Mouse

[SwissProt: Q63046](#) Rat

[Unigene: 149261](#) Human

[Unigene: 612648](#) Human

[Unigene: 4081](#) Mouse

[Unigene: 470227](#) Mouse

[Unigene: 11201](#) Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

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