

Anti-RUNX1 antibody



Description Rabbit polyclonal to RUNX1.

Model STJ95555

Host Rabbit

Reactivity Human, Mouse, Rat

Applications ELISA, IF, IHC, WB

Immunogen Synthesized peptide derived from human RUNX1 around the non-

phosphorylation site of S276.

Immunogen Region 240-320 aa

Gene ID <u>861</u>

Gene Symbol RUNX1

Dilution range WB 1:500-1:2000IHC 1:100-1:300IF 1:200-1:1000ELISA 1:20000

Specificity RUNX1 Polyclonal Antibody detects endogenous levels of RUNX1 protein.

Tissue Specificity Expressed in all tissues examined except brain and heart. Highest levels in

thymus, bone marrow and peripheral blood.

Purification The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Note For Research Use Only (RUO).

Protein Name Runt-related transcription factor 1 Acute myeloid leukemia 1 protein Core-

binding factor subunit alpha-2 CBF-alpha-2 Oncogene AML-1 Polyomavirus enhancer-binding protein 2 alpha B subunit PEA2-alpha B PEBP2-alpha

Molecular Weight 50 kDa

Clonality Polyclonal

Conjugation Unconjugated

Isotype IgG

Formulation Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Concentration 1 mg/ml

Storage Instruction Store at -20°C, and avoid repeat freeze-thaw cycles.

Database Links HGNC:104710MIM:151385

Alternative Names Runt-related transcription factor 1 Acute myeloid leukemia 1 protein Core-

binding factor subunit alpha-2 CBF-alpha-2 Oncogene AML-1 Polyomavirus enhancer-binding protein 2 alpha B subunit PEA2-alpha B PEBP2-alpha

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. 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.

Sequence and Domain Family A proline/serine/threonine rich region at the C-terminus is necessary for

transcriptional activation of target genes.

Cellular Localization Nucleus.

Post-translational Phosphorylated in its C-terminus upon IL-6 treatment. Phosphorylation enhances interaction with KAT6A.; Methylated. Phosphorylated in Ser-

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.

St John's Laboratory Ltd

F +44 (0)207 681 2580

T +44 (0)208 223 3081

W http://www.stjohnslabs.com/ E info@stjohnslabs.com