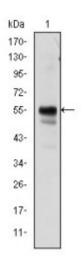


## Anti-RUNX1 antibody



**Description** 

Mouse monoclonal to RUNX1.

Model STJ98371

**Host** Mouse

**Reactivity** Human

**Applications** ELISA, IF, WB

**Immunogen** Synthesized peptide of human RUNX1.

**Gene ID** <u>861</u>

Gene Symbol RUNX1

**Dilution range** WB 1:500-1:2000IF 1:200-1:1000ELISA 1:10000

**Specificity** RUNX1 Monoclonal 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** Affinity purification

Clone ID 5A1

**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

**Clonality** Monoclonal

**Conjugation** Unconjugated

Isotype IgG1

**Formulation** Ascitic fluid containing 0.03% sodium azide.

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

Database Links <u>HGNC:104710MIM:151385</u>

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-24

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