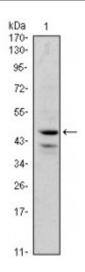
## St John's Laboratory

## Anti-GATA-1 antibody



**Description** Mouse monoclonal to GATA-1.

Model STJ98097

**Host** Mouse

**Reactivity** Human

**Applications** ELISA, WB

**Immunogen** Purified recombinant fragment of human GATA-1 expressed in E. Coli.

**Gene ID** 2623

Gene Symbol GATA1

**Dilution range** WB 1:500-1:2000ELISA 1:10000

**Specificity** GATA-1 Monoclonal Antibody detects endogenous levels of GATA-1

protein.

**Tissue Specificity** Erythrocytes.

**Purification** Affinity purification

Clone ID 4G1

**Note** For Research Use Only (RUO).

**Protein Name** Erythroid transcription factor Eryf1 GATA-binding factor 1 GATA-1 GF-1

NF-E1 DNA-binding protein

**Clonality** Monoclonal

**Conjugation** Unconjugated

Isotype IgG1

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

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

HGNC:4170OMIM:300367 **Database Links** 

Erythroid transcription factor Eryf1 GATA-binding factor 1 GATA-1 GF-1 **Alternative Names** 

NF-E1 DNA-binding protein

**Function** Transcriptional activator or repressor which probably serves as a general

switch factor for erythroid development. It binds to DNA sites with the

consensus sequence 5'-[AT]GATA[AG]-3' within regulatory regions of globin

genes and of other genes expressed in erythroid cells. Activates the transcription of genes involved in erythroid differentiation of K562 erythroleukemia cells, including HBB, HBG1/2, ALAS2 and HMBS.

**Sequence and Domain Family** The two fingers are functionally distinct and cooperate to achieve specific,

stable DNA binding. The first finger is necessary only for full specificity and

stability of binding, whereas the second one is required for binding.

Nucleus. **Cellular Localization** 

Post-translational Highly phosphorylated on serine residues. Phosphorylation on Ser-310 is **Modifications** 

enhanced on erythroid differentiation. Phosphorylation on Ser-142 promotes

sumoylation on Lys-137. Sumoylation on Lys-137 is enhanced by

phosphorylation on Ser-142 and by interaction with PIAS4. Sumoylation with SUMO1 has no effect on transcriptional activity. Acetylated at 2 conserved lysine-rich motifs by CREBBP in vitro. Acetylation does not affect DNAbinding in vitro but is essential to induce erythroid differentiation and for binding chromatin in vivo. Acetylated on Lys-233, Lys-245 Lys-246 by

EP300.

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