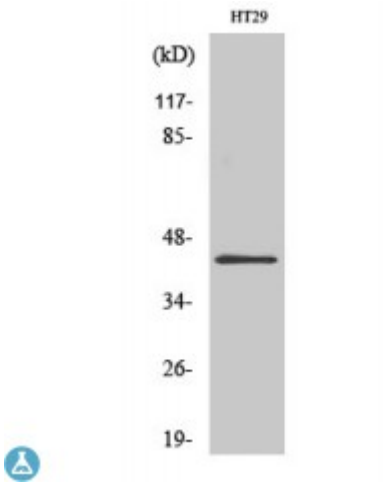
Anti-GATA-1 antibody



Description	Rabbit polyclonal to GATA-1.

Model	STJ93223
Host	Rabbit
Reactivity	Human, Mouse, Rat
Applications	ELISA, IF, IHC, IP, WB
Immunogen	Synthesized peptide derived from human GATA-1 around the non-phosphorylation site of S142.
Immunogen Region	80-160 aa
Gene ID	2623
Gene Symbol	GATA1
Dilution range	WB 1:500-1:2000IHC 1:100-1:300IP 1:200-500IF 1:200-1:1000ELISA 1:10000
Specificity	GATA-1 Polyclonal Antibody detects endogenous levels of GATA-1 protein.
Tissue Specificity	Erythrocytes.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
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
Molecular Weight	43 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:4170OMIM:300367
Alternative Names	Erythroid transcription factor Eryf1 GATA-binding factor 1 GATA-1 GF-1 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 .
Cellular Localization	Nucleus.
Post-translational Modifications	Highly phosphorylated on serine residues. Phosphorylation on Ser-310 is 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 DNA-binding 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.