

Rabbit GATA1 Polyclonal Antibody | anti-GATA1 antibody

Phospho-GATA1 (Ser310) Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA321536	Rabbit	Human, Mouse, Rat	ELISA, Immunocytochemistry, Immunofluorescence, Western Blot

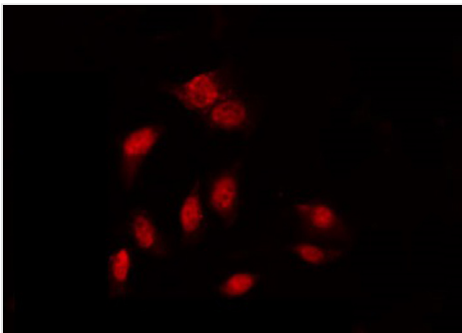
PRODUCT SYNONYMS

GATA1; Polyclonal Antibody; Phospho-GATA1 (Ser310) Antibody; Anemia; X-linked; without thrombocytopenia; included; ERYF 1; Eryf1; Erythroid transcription factor; Erythroid transcription factor 1; GATA 1; GATA binding factor 1; GATA binding protein 1 (globin transcription factor 1); GATA binding protein 1; GATA-1; GATA-binding factor 1; GATA1_HUMAN; GF 1; GF-1; GF1; Globin transcription factor 1; NF E1; NF E1 DNA binding protein; NF-E1 DNA-binding protein; NFE 1; NFE1; Nuclear factor erythroid 1; Transcription factor GATA1; XLANP; XLTDA; XLTT; anti-GATA1 antibody

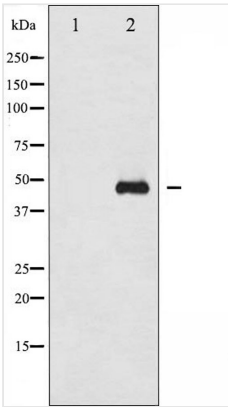
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	Phospho-GATA1 (Ser310) antibody detects endogenous levels of GATA1 only when phosphorylated at Serine 310
Purity/Purification	From purified rabbit serum by affinity purification via sequential chromatography on phospho- and non-phospho-peptide affinity columns.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	413
Applicable Applications for anti-GATA1 antibody	ELISA, ICC (Immunocytochemistry), IF (Immunofluorescence), WB (Western Blot)
Immunogen	A synthesized peptide derived from human GATA1 around the phosphorylation site of Serine 310
Subcellular Location	Nucleus.
Tissue Specificity	Erythrocytes.
Predicted Cross Reactivity	Pig, Sheep, Rabbit, Chicken
Similarity	Pig (100%), Sheep (100%), Rabbit (100%), Chicken (82%)
Conjugation	Unconjugated
Epitope	Phospho Ser310
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



IF (Immunofluorescence)
AAA321536 staining K562 by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25 degree C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37 degree C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) Ab, diluted at 1/600, was used as the secondary antibody.



WB (Western Blot)
Western blot analysis of GATA1 phosphorylation expression in EPO treated COS7 whole cell lysates, The lane on the left is treated with the antigen-specific peptide.

ADDITIONAL INFORMATION

Related Product Information for anti-GATA1 antibody	Description: GATA1 Transcriptional activator which probably serves as a general switch factor for erythroid development. It binds to DNA sites with the consensus sequence [AT]GATA[AG] within regulatory regions of globin genes and of other genes expressed in erythroid cells. May form homodimers or heterodimers with other isoforms. 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 (PubMed:24245781). Subunit Structure: May form homodimers or heterodimers with other isoforms. Interacts (via the N-terminal zinc finger) with ZFPM1. Interacts with GFI1B. Interacts with PIAS4; the interaction enhances sumoylation and represses the transactivational activity in a sumoylation-independent manner. Interacts with LMCD1. Interacts with BRD3 (By similarity). Interacts with CREBBP; the interaction stimulates acetylation and transcriptional activity in vivo (By similarity). Interacts with EP300. Interacts with MED1, CCAR1 and CALCOCO1. Interacts with CEBPE (PubMed:26019275). 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 (By similarity). 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 (By similarity). 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 (By similarity). Acetylated on Lys-233, Lys-245 Lys-246 by EP300. Similarity: 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 (By similarity).
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NCBI AND UNIPROT INFORMATION

NCBI GI #	4503925
NCBI GeneID	2623
NCBI Accession #	NP_002040.1
NCBI GenBank Nucleotide #	NM_002049.3
UniProt Accession #	P15976; Q96GB8
Molecular Weight	Observed: 43 kDa Predicted: 43 kDa
NCBI Official Full Name	erythroid transcription factor
NCBI Official Synonym Full Names	GATA binding protein 1

NCBI Official Symbol	GATA1
NCBI Official Synonym Symbols	GF1; GF-1; NFE1; XLTT; ERYF1; NF-E1; XLANP; XLTDA; GATA-1
NCBI Protein Information	erythroid transcription factor
UniProt Protein Name	Erythroid transcription factor
UniProt Gene Name	GATA1
UniProt Synonym Gene Names	ERYF1; GF1; GATA-1; GF-1

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/gata1-antibody-immunocytochemistry-immunofluorescence-western-blot-elisa/321536>