

ARG51039 anti-GATA1 antibody

Package: 100 µl, 50 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes GATA1
Tested Reactivity	Hu, Ms, Rat
Tested Application	ICC/IF, IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	GATA1
Species	Human
Immunogen	Peptide sequence around aa.140~144 (R-L-S-P-D) derived from Human GATA1.
Conjugation	Un-conjugated
Alternate Names	XLTD; Eryf1; GATA-1; GF-1; GF1; NF-E1; ERYF1; XLANP; NFE1; GATA-binding factor 1; XLTT; NF-E1 DNA-binding protein; Erythroid transcription factor

Application Instructions

Application table	Application	Dilution
	ICC/IF	1:100 - 1:200
	IHC-P	1:50 - 1:100
	WB	1:500 - 1:1000

Application Note * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Properties

Form	Liquid
Purification	Antibodies were produced by immunizing rabbits with KLH-conjugated synthetic peptide. Antibodies were purified by affinity-chromatography using epitope-specific peptide.
Buffer	PBS (without Mg ²⁺ and Ca ²⁺ , pH 7.4), 150mM NaCl, 0.02% Sodium azide and 50% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

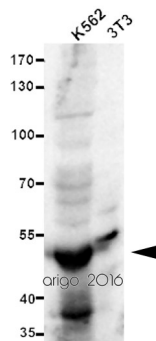
Note

For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

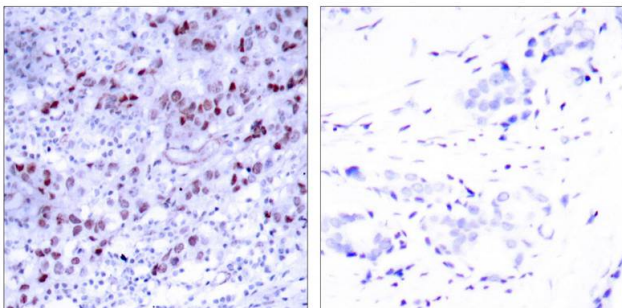
Gene Symbol	GATA1
Gene Full Name	GATA binding protein 1 (globin transcription factor 1)
Background	GATA1 encodes a protein which belongs to the GATA family of transcription factors. The protein plays an important role in erythroid development by regulating the switch of fetal hemoglobin to adult hemoglobin. Mutations in this gene have been associated with X-linked dyserythropoietic anemia and thrombocytopenia.
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. [UniProt]
Research Area	Developmental Biology antibody; Gene Regulation antibody
Calculated Mw	43 kDa
PTM	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.

Images



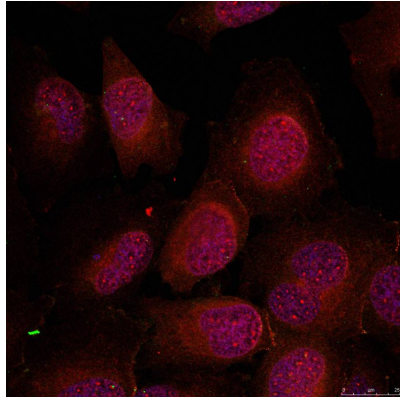
ARG51039 anti-GATA1 antibody WB image

Western blot: 20 µg of K562 and 3T3 cells stained with ARG51039 anti-GATA1 antibody at 1:500 dilution.



ARG51039 anti-GATA1 antibody IHC-P image

Immunohistochemistry: paraffin-embedded human breast carcinoma tissue stained with anti-GATA1 antibody ARG51039 (left) or the same antibody preincubated with blocking peptide (right).



ARG51039 anti-GATA1 antibody ICC/IF image

Immunofluorescence: methanol-fixed HeLa cells stained with anti-GATA1 antibody ARG51039.