

ARG41630 anti-GATA1 antibody

Package: 100 μl Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes GATA1
Tested Reactivity	Hu, Ms
Tested Application	ChIP, ICC/IF, IHC-P, IP, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	lgG
Target Name	GATA1
Species	Human
Immunogen	Synthetic peptide of Human GATA1.
Conjugation	Un-conjugated
Alternate Names	XLTDA; 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
	ChIP	Assay-dependent
	ICC/IF	1:50 - 1:200
	IHC-P	1:50 - 1:200
	IP	1:50
	WB	1:500 - 1:2000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	K562	
Observed Size	~ 42 kDa	

Properties

Form	Liquid
Purification	Affinity purified.
Buffer	PBS (pH 7.4), 150 mM NaCl, 0.02% Sodium azide and 50% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol

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	This gene 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. [provided by RefSeq, Jul 2008]
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. [UniProt]
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. [UniProt]
Cellular Localization	Nucleus. [UniProt]

Images



ARG41630 anti-GATA1 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Mouse spleen tissue stained with ARG41630 anti-GATA1 antibody.



ARG41630 anti-GATA1 antibody WB image

Western blot: K562 cell lysate stained with ARG41630 anti-GATA1 antibody.