ARG63863
anti-GATA1 antibody

Package: 100 µg
Store at: -20°C

Summary

Product Description	Goat Polyclonal antibody recognizes GATA1
Tested Reactivity	Hu, Ms
Predict Reactivity	Cow, Rat, Dog
Tested Application	FACS, ICC/IF, WB
Host	Goat
Clonality	Polyclonal
Isotype	IgG
Target Name	GATA1
Species	Human
Immunogen	C-DAEAYRHSPVFQ
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
FACS	10 µg/ml
ICC/IF	10 µg/ml
WB	0.3 - 1 µg/ml

Application Note

WB: Recommend incubate at RT for 1h.
* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Properties

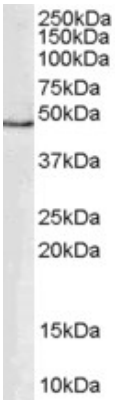
Form	Liquid
Purification	Purified from goat serum by antigen affinity chromatography.
Buffer	Tris saline (pH 7.3), 0.02% Sodium azide and 0.5% BSA.
Preservative	0.02% Sodium azide
Stabilizer	0.5% BSA
Concentration	0.5 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. 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

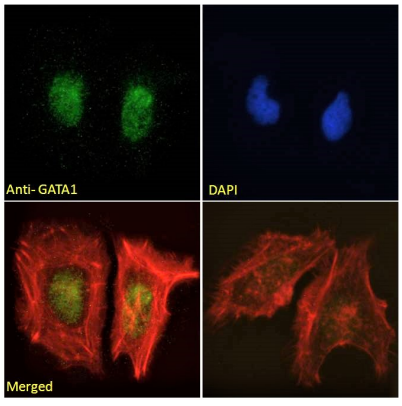
Database links	GeneID: 14460 Mouse GeneID: 2623 Human Swiss-port # P15976 Human Swiss-port # P17679 Mouse
Background	This gene encodes a protein which belongs to the GATA family of transcription factors. The protein plays an important role in erythroid development by regulating the switch of fetal hemoglobin to adult hemoglobin. Mutations in this gene have been associated with X-linked dyserythropoietic anemia and thrombocytopenia. [provided by RefSeq, Jul 2008]
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



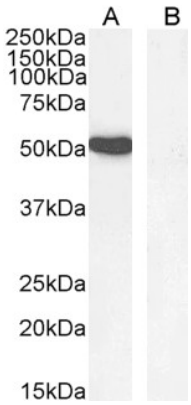
ARG63863 anti-GATA1 antibody WB image

Western Blot: human PBMC lysate (35 µg protein in RIPA buffer) stained with ARG63863 anti-GATA1 antibody at 0.3 µg/ml dilution.



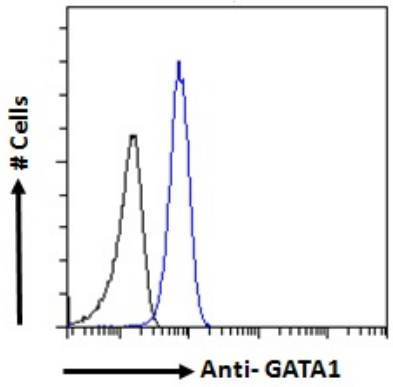
ARG63863 anti-GATA1 antibody ICC/IF image

Immunofluorescence: Paraformaldehyde fixed HeLa cells permeabilized with 0.15% Triton. Cells were stained with ARG63863 anti-GATA1 antibody (green) at 10 µg/ml dilution for 1 hour. DAPI (blue) for nuclear staining. Phalloidin (red) for Actin filaments staining. Negative control: Unimmunized goat IgG (green) at 10 µg/ml dilution.



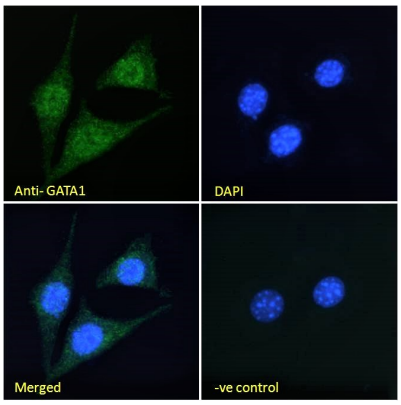
ARG63863 anti-GATA1 antibody WB image

Western blot: 35 µg of K562 nuclear lysate (A) and Human hippocampus (B, negative control) lysates (in RIPA buffer) stained with ARG63863 anti-GATA1 antibody at 1 µg/ml dilution and incubated at RT for 1 hour.



ARG63863 anti-GATA1 antibody FACS image

Flow Cytometry: Paraformaldehyde-fixed K562 cells permeabilized with 0.5% Triton. Cells were stained with ARG63863 anti-GATA1 antibody (blue line) at 10 µg/ml dilution for 1 hour, followed by incubation with Alexa FluorR 488 labelled secondary antibody. IgG control: Unimmunized goat IgG (black line).



ARG63863 anti-GATA1 antibody ICC/IF image

Immunofluorescence: Paraformaldehyde fixed NIH/3T3 cells permeabilized with 0.15% Triton. Cells were stained with ARG63863 anti-GATA1 antibody (green) at 10 µg/ml dilution for 1 hour. DAPI (blue) for nuclear staining. Negative control: Unimmunized goat IgG (green) at 10 µg/ml dilution.