

Goat Anti-GATA1 Antibody

Peptide-affinity purified goat antibody Catalog # AF1465a

### Specification

# **Goat Anti-GATA1 Antibody - Product Information**

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Concentration Isotype Calculated MW WB, E <u>P15976</u> <u>NP\_002040</u>, <u>2623</u> Human Mouse, Rat, Dog Goat Polyclonal 100ug/200ul IgG 42751

## **Goat Anti-GATA1 Antibody - Additional Information**

Gene ID 2623

**Other Names** Erythroid transcription factor, Eryf1, GATA-binding factor 1, GATA-1, GF-1, NF-E1 DNA-binding protein, GATA1, ERYF1, GF1

Dilution WB~~1:1000 E~~N/A

Format

0.5 mg lgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions** Goat Anti-GATA1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

#### **Goat Anti-GATA1 Antibody - Protein Information**

Name GATA1

Synonyms ERYF1, GF1



Function

Transcriptional activator or repressor which serves as a general switch factor for erythroid development (PubMed:<a href="http://www.uniprot.org/citations/35030251" target="\_blank">35030251</a>). 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:<a href="http://www.uniprot.org/citations/24245781" target=" blank">24245781</a>).

**Cellular Location** Nucleus.

Tissue Location Erythrocytes..

# Goat Anti-GATA1 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

#### Goat Anti-GATA1 Antibody - Images



AF1465a (0.3  $\mu$ g/ml) staining of human PBMC lysate (35  $\mu$ g protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

## Goat Anti-GATA1 Antibody - 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.



## Goat Anti-GATA1 Antibody - References

Developmental stage-specific interplay of GATA1 and IGF signaling in fetal megakaryopoiesis and leukemogenesis. Klusmann JH, et al. Genes Dev, 2010 Aug 1. PMID 20679399.

HSP27 controls GATA-1 protein level during erythroid cell differentiation. de Thonel A, et al. Blood, 2010 Jul 8. PMID 20410505.

Down-regulation of GATA1 uncouples STAT5-induced erythroid differentiation from stem/progenitor cell proliferation. Wierenga AT, et al. Blood, 2010 Jun 3. PMID 20339093.

Human promoter mutations unveil Oct-1 and GATA-1 opposite action on Gfi1b regulation. Hern Indez A, et al. Ann Hematol, 2010 Aug. PMID 20143233.

The transcription factor GATA-1 is overexpressed in breast carcinomas and contributes to survivin upregulation via a promoter polymorphism. Boidot R, et al. Oncogene, 2010 Apr 29. PMID 20101202.