

**Phospho-GATA1-S142 Antibody**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AE1013c****Specification**

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**Phospho-GATA1-S142 Antibody - Product Information**

Application	WB, IHC, IF
Primary Accession	<a href="#">P15976</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Concentration	1mg/ml
Isotype	Rabbit IgG
Calculated MW	42751

**Phospho-GATA1-S142 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

**Target/Specificity**

The antibody was affinity-purified from rabbit antiserum using epitope-specific phosphopeptide column, and the antibody against non-phosphopeptide was removed using non-phosphopeptide column corresponding to the phosphorylation site.

**Dilution**

WB~~1:500~1:1000

IHC~~1:50~1:100

IF~~1:100~200

**Format**

affinity Purified IgG, in PBS, 0.02% sodium azide and 50% glycerol.

**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**

Phospho-GATA1-S142 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Phospho-GATA1-S142 Antibody - Protein Information****Name** GATA1

**Synonyms** ERYF1, GF1

**Function**

Transcriptional activator or repressor which serves as a general switch factor for erythroid development (PubMed: [35030251](http://www.uniprot.org/citations/35030251)). 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](http://www.uniprot.org/citations/24245781)).

**Cellular Location**

Nucleus.

**Tissue Location**

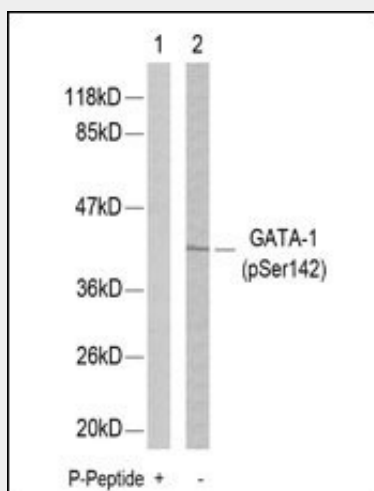
Erythrocytes..

**Phospho-GATA1-S142 Antibody - Protocols**

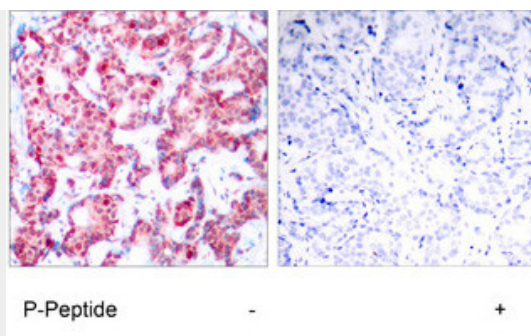
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

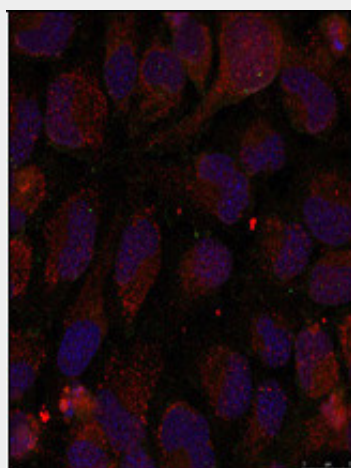
**Phospho-GATA1-S142 Antibody - Images**



Western blot analysis of extracts from K562 cells using Phospho-GATA1-S142 Antibody (#AE1013c).



Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using Phospho-GATA1-S142 Antibody (#AE1013c).



Immunofluorescence staining of methanol-fixed HeLa cells using Phospho-GATA1-S142 Antibody (#AE1013c, Red).

### Phospho-GATA1-S142 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.

### Phospho-GATA1-S142 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. Hernández 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.