

## Summary

Production Name	GATA-1 (phospho Ser310) Rabbit Polyclonal Antibody	
Description	Rabbit Polyclonal Antibody	
Host	Rabbit	
Application	WB,ELISA	
Reactivity	Human,Mouse,Rat,Monkey	

## Performance

Conjugation	Unconjugated	
Modification	Phospho Antibody	
lsotype	lgG	
Clonality	Polyclonal	
Form	Liquid	
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw	
	cycles.	
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.	
Purification	Affinity purification	

## Immunogen

Gene Name	GATA1	
Alternative Names	GATA1; ERYF1; GF1; Erythroid transcription factor; Eryf1; GATA-binding factor 1; GATA-	
	1; GF-1; NF-E1 DNA-binding protein	
Gene ID	2623.0	
SwissProt ID	P15976.The antiserum was produced against synthesized peptide derived from human	
	GATA1 around the phosphorylation site of Ser310. AA range:277-326	

# Application

Dilution Ratio	WB 1:500 - 1:2000. ELISA: 1:20000

#### **Molecular Weight**



## Background

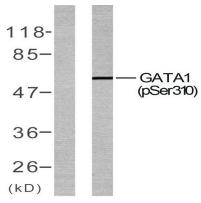
This gene encodes a protein which belongs to the GATA family of transcription factors. The protein plays an important role in erythroid development by regulating the switch of fetal hemoglobin to adult hemoglobin. Mutations in this gene have been associated with X-linked dyserythropoietic anemia and thrombocytopenia. [provided by RefSeq, Jul 2008], disease: Defects in GATA1 are the cause of X-linked dyserythropoietic anemia and thrombocytopenia (XDAT) [MIM:300367]. XDAT is a disorder characterized by erythrocytes with abnormal size and shape, and paucity of platelets in peripheral blood. The bone marrow contains abundant and abnormally small megakaryocytes., disease: Defects in GATA1 are the cause of X-linked thrombocytopenia with beta-thalassemia (XLTT) [MIM:314050]; also called thrombocytopenia, platelet dysfunction, hemolysis, and imbalanced globin synthesis. The disease consists of an unusual form of thrombocytopenia with beta-thalassemia. Patients have splenomegaly and petechiae, moderate thrombocytopenia, prolonged bleeding time due to platelet dysfunction, reticulocytosis and unbalanced (hemo)globin chain synthesis resembling that of beta-thalassemia minor.,domain:The two fingers are functionally distinct and cooperate to achieve specific, stable DNA binding. The first finger is necessary only for full specificity and stability of binding, whereas the second one is required for binding.,function:Transcriptional activator which probably serves as a general switch factor for erythroid development. It binds to DNA sites with the consensus sequence [AT]GATA[AG] within regulatory regions of globin genes and of other genes expressed in erythroid cells.,PTM:Highly phosphorylated on serine residues. Phosphorylation on Ser-310 is enhanced on erythroid differentiation. Phosphorylation on Ser-142 promotes sumovlation on Lys-137, PTM: Sumoylation on Lys-137 is enhanced by phosphorylation on Ser-142 and by interaction with PIAS4. Sumoylation by SUMO1 has no effect on transcriptional activity., similarity: Contains 2 GATA-type zinc fingers., subunit: Interacts (via the N-terminal zinc finger) with ZFPM1. Interacts with GFI1B. Interacts with PIAS4; the interaction enhances sumoylation and represses the transactivational activity in a sumoylation-independent manner., tissue specificity:Erythrocytes.,

#### **Research Area**

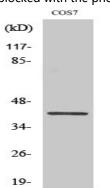
Protein\_Acetylation

### Image Data





Western blot analysis of lysates from COS7 cells treated with EPO, using GATA1 (Phospho-Ser310) Antibody. The lane on the left is blocked with the phospho peptide.



Western Blot analysis of various cells using Phospho-GATA-1 (S310) Polyclonal Antibody diluted at 1: 500 cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit (SC-003,Inventbiotech,MN,USA).

#### Note

For research use only.