

# GATA-1 (Phospho Ser310) Rabbit pAb

CatalogNo: YP0120 Orthogonal Validated 

## Key Features

### Host Species

- Rabbit

### Reactivity

- Human, Mouse, Rat, Monkey

### Applications

- WB, ELISA

### MW

- 43kD (Calculated)

### Isotype

- IgG

## Storage

**Storage\*** -15°C to -25°C/1 year (Do not lower than -25°C)

**Formulation** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

## Recommended Dilution Ratios

**WB 1:500-1:2000**

**ELISA 1:20000**

**Not yet tested in other applications.**

## Basic Information

**Clonality** Polyclonal

## Immunogen Information

**Immunogen** The antiserum was produced against synthesized peptide derived from human GATA1 around the phosphorylation site of Ser310. AA range:277-326

**Specificity** Phospho-GATA-1 (S310) Polyclonal Antibody detects endogenous levels of GATA-1 protein only when phosphorylated at S310. The name of modified sites may be influenced by many factors, such as species (the modified site was not originally found in human samples) and the change of protein sequence (the previous protein sequence is incomplete, and the protein sequence may be prolonged with the development of protein sequencing technology). When naming, we will use the "numbers" in historical reference to keep the sites consistent with the reports. The antibody binds to the following modification sequence (lowercase letters are modification sites):KASGK

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## | Target Information

**Gene name** GATA1

**Protein Name** Erythroid transcription factor

Organism	Gene ID	UniProt ID
Human	<a href="#">2623</a> ;	<a href="#">P15976</a> ;
Mouse	<a href="#">14460</a> ;	<a href="#">P17679</a> ;
Rat	<a href="#">25172</a> ;	<a href="#">P43429</a> ;

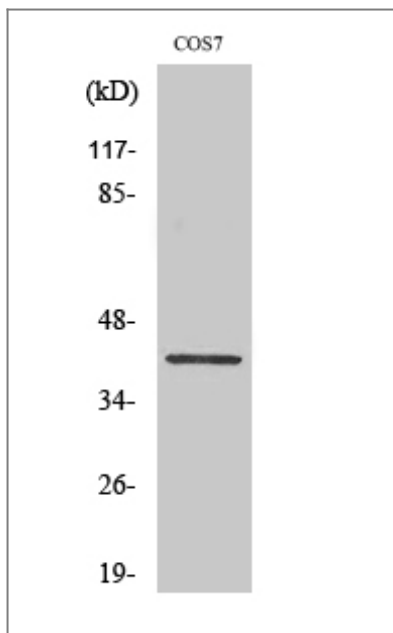
**Cellular Localization** Nucleus.

**Tissue specificity** Erythrocytes.

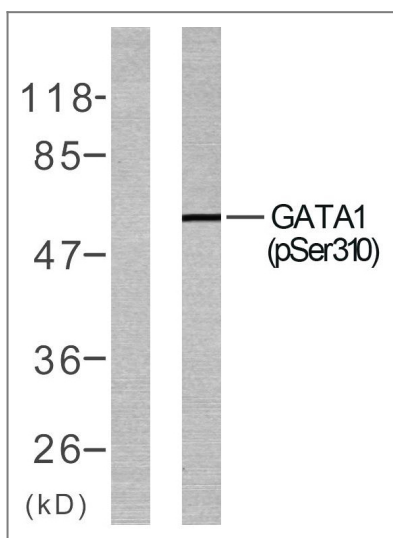
**Function** Disease:Defects in GATA1 are the cause of X-linked dyserythropoietic anemia and thrombocytopenia (XDAT) [MIM:300367]. XDAT is a disorder characterized by erythrocytes with abnormal size and shape, and paucity of platelets in peripheral blood. The bone marrow contains abundant and abnormally 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 sumoylation 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.,

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## | Validation Data



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



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.

## Contact information

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Please scan the QR code to access additional product information:  
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