
Product Name: GATA-1 Rabbit Polyclonal Antibody**Catalog #: APRab11310**

For research use only.

Summary

Description	Rabbit polyclonal Antibody
Host	Rabbit
Application	WB,IHC,ICC/IF,ELISA,IP
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:200-1:1000,ELISA 1:5000-1:20000,IP 1:20-1:50
Molecular Weight	43kDa

Antigen Information

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
Immunogen	The antiserum was produced against synthesized peptide derived from human GATA1. AA range:109-158

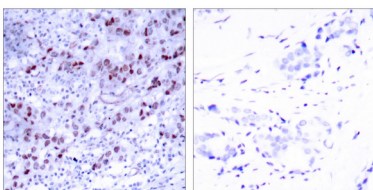
Background

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 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.,

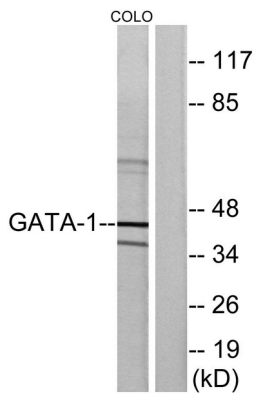
Research Area

Protein_Acetylation

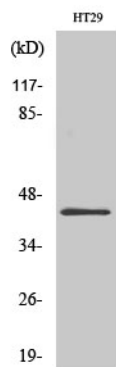
Image Data



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma tissue, using GATA1 Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from COLO cells, using GATA1 Antibody. The lane on the right is blocked with the synthesized peptide.



Western Blot analysis of various cells using GATA-1 Polyclonal Antibody diluted at 1 : 2000.