



GATA-1 Rabbit mAb

Catalog No	YP-rAb-18425
Isotype	IgG
Reactivity	Human,Mouse,Rat
Applications	WB,IHC,IF,IP,ELISA
Gene Name	GATA1
Protein Name	Erythroid transcription factor
Purification Process	Protein A
Specificity	Endogenous
Formulation	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
Source	Monoclonal, Rabbit,IgG
Dilution	IHC 1:200-1:1000; WB 1:2000-1:10000; IF 1:200-1:1000; ELISA 1:5000-1:20000; IP 1:50-1:200; Note: For IHC, we suggest antigen retrieval with TE buffer pH 9.0
Concentration	0.5 mg/ml
Purity	≥90%
Storage Stability	-15 ° C to -25 ° C/1 year(Do not lower than -25 ° C)
Synonyms	GATA-1;Erythroid transcription factor;GATA1 ; ERYF1 ; GF1 ; Erythroid transcription factor ; GATA-binding factor 1 ; GATA-1 ; GF-1 ; NF-E1 DNA-binding protein;GATA1
Observed Band	50kD
Calculated Molecular Weight	43kD
Cell Pathway	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.

Background

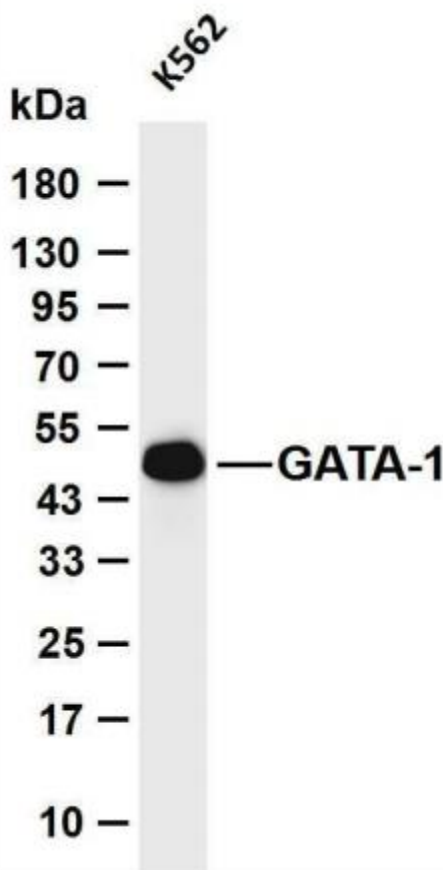
This gene encodes a protein which belongs to the GATA family of transcription factors. The protein plays an important role in erythroid development by regulating the switch of fetal hemoglobin to adult hemoglobin. Mutations in this gene have been associated with X-linked dyserythropoietic anemia and thrombocytopenia. [provided by RefSeq, Jul 2008]

matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-GATA-1 antibody. The HRP-conjugated Goat anti-Rabbit IgG (H + L) antibody was used to detect the antibody. Lane 1: K562 Predicted band size: 43kDa Observed band size: 50kDa

