GATA-1 Mouse mAb

CatalogNo: YM0296

Key Features

Host Species
- Mouse

Reactivity
- Human

Applications
- WB,IHC,IF,ELISA

MW
- 43kD (Calculated)

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
IHC 1:200-1:1000
IF 1:200-1:1000
ELISA 1:10000
Not yet tested in other applications.

Basic Information

Clonality	Monoclonal
Clone Number	15A9

Immunogen Information

Immunogen	Purified recombinant fragment of human GATA-1 expressed in E. Coli.
Specificity	GATA-1 Monoclonal Antibody detects endogenous levels of GATA-1 protein.

Target Information

Gene name GATA1

Protein Name Erythroid transcription factor

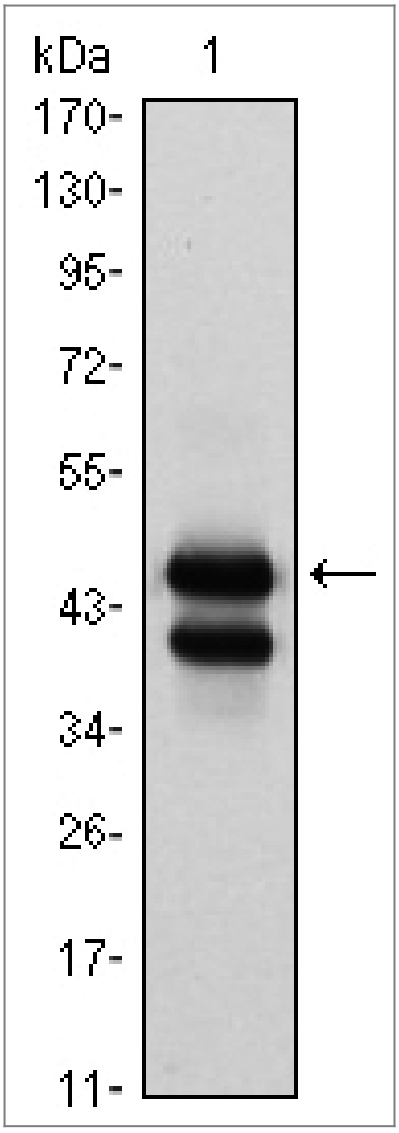
Organism	Gene ID	UniProt ID
Human	2623;	P15976;
Mouse		P17679;

Cellular Localization Nucleus.

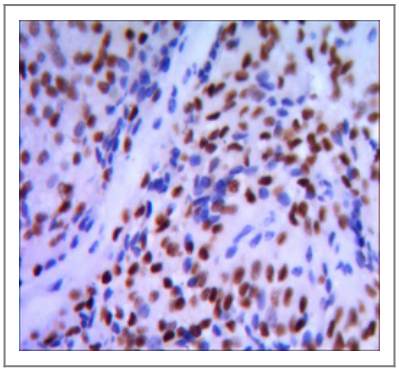
Tissue specificity Erythrocytes.

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.,

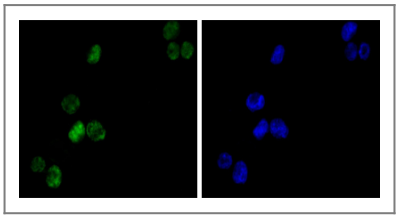
Validation Data



Western Blot analysis using GATA-1 Monoclonal Antibody against K562 (1) cell lysate.



Immunohistochemistry analysis of paraffin-embedded pancreatic cancer, with DAB staining using GATA-1 Monoclonal Antibody.



Immunofluorescence analysis of K562(left) cells using GATA-1 Monoclonal Antibody (green). Blue: DRAQ5 fluorescent DNA dye.

Contact information

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Please scan the QR code to access additional product information:
GATA-1 Mouse mAb

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