# abcam

## Product datasheet

## Anti-GATA1 antibody ab40847

## 画像数 5

#### 製品の概要

製品名 Anti-GATA1 antibody

製品の詳細 Goat polyclonal to GATA1

由来種 Goat

アプリケーション 適用あり: ICC/IF, Flow Cyt (Intra), WB

**種交差性 交差種:** Mouse, Human

交差が予測される動物種: Rat, Dog 🔷

免疫原 Synthetic peptide corresponding to Human GATA1 aa 65-76 (internal sequence).

Sequence:

DAEAYRHSPVFQ

Database link: P15976

Run BLAST with

Run BLAST with

ポジティブ・コントロール

特記事項

Flow Cyt (Intra): K562 cells.

The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

#### 製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

**パッファー** pH: 7.30

Preservative: 0.02% Sodium azide

Constituents: Tris buffered saline, 0.5% BSA

精製度 Immunogen affinity purified

特記事項(精製) Purified from goat serum by ammonium sulphate precipitation followed by antigen affinity

chromatography using the immunizing peptide.

1

ポリモノ

アイソタイプ IgG

#### アプリケーション

The Abpromise guarantee Abpromise保証は、次のテスト済みアプリケーションにおけるab40847の使用に適用されますアプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
ICC/IF		Use a concentration of 10 μg/ml.
Flow Cyt (Intra)		Use a concentration of 10 μg/ml.
WB		Use a concentration of 0.3 - 1 µg/ml. Predicted molecular weight: 43 kDa.  1 hour primary incubation is recommended for this product.

#### ターゲット情報

#### 機能

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.

#### 組織特異性

関連疾患

Erythrocytes.

ポリクローナル

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.

Defects in GATA1 are the cause of X-linked thrombocytopenia with beta-thalassemia (XLTT) [MIM:314050]; also knwon as thrombocytopenia, platelet dysfunction, hemolysis, and imbalanced globin synthesis. XLTT 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 hemoglobin chain synthesis resembling that of beta-thalassemia minor.

Defects in GATA1 are the cause of anemia without thrombocytopenia X-linked (XLAWT) [MIM:300835]. XLAWT is a form of anemia characterized by abnormal morphology of erythrocytes and granulocytes in peripheral blood, bone marrow dysplasia with hypocellularity of erythroid and granulocytic lineages, and normal or increased number of megakaryocytes. Neutropenia of a variable degree is present in affected individuals.

#### 配列類似性

Contains 2 GATA-type zinc fingers.

ドメイン

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.

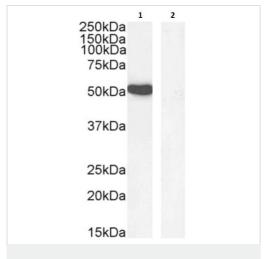
#### 翻訳後修飾

Highly phosphorylated on serine residues. Phosphorylation on Ser-310 is enhanced on erythroid differentiation. Phosphorylation on Ser-142 promotes sumoylation on Lys-137.

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.

#### 画像



Western blot - Anti-GATA1 antibody (ab40847)

All lanes: Anti-GATA1 antibody (ab40847) at 1 μg/ml

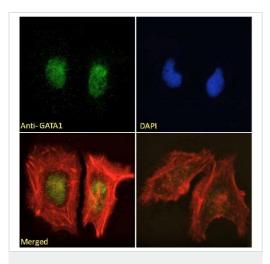
Lane 1: K562 nuclear cell lysate

Lane 2: Human Hippocampus lysate

Developed using the ECL technique.

Predicted band size: 43 kDa

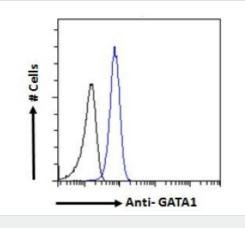
Negative Control: Human Hippocampus Lysate.



Immunocytochemistry/ Immunofluorescence - Anti-GATA1 antibody (ab40847)

Immunocytochemsitry/Immunofluorescence analysis of paraformaldehyde-fixed, 0.15% Triton-permeabilized HeLa cells staining GATA1 with ab40847 at 10µg/ml, followed by Alexa Fluor 488 secondary antibody at 2ug/ml (green). DAPI was used as a nuclear counterstain (blue) and actin filaments were stained with phalloidin (red).

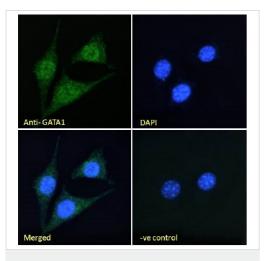
Negative control: Unimmunized goat lgG (10ug/ml) followed by Alexa Fluor 488 secondary antibody (2ug/ml).



Flow Cytometry (Intracellular) - Anti-GATA1 antibody (ab40847)

Flow cytometric analysis of paraformaldehyde fixed, 0.15% triton-permeablized K562 cells labelling GATA1 with ab40847 at 10µg/ml, followed by Alexa Fluor 488 secondary antibody (1ug/ml) (blue). Primary incubation carried out for 1hr.

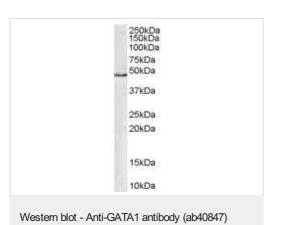
lgG control: Unimmunized goat lgG (black line) followed by Alexa Fluor 488 secondary antibody.



Immunocytochemistry/ Immunofluorescence - Anti-GATA1 antibody (ab40847)

Immunocytochemsitry/Immunofluorescence analysis of paraformaldehyde-fixed, 0.15% Triton-permeabilized NIH3T3 cells staining GATA1 with ab40847 at 10µg/ml, followed by Alexa Fluor 488 secondary antibody at 2ug/ml (green). Primary incubation was carried out for 1 hour. DAPI was used as a nuclear counterstain (blue).

Negative control: Unimmunized goat lgG (10ug/ml) followed by Alexa Fluor 488 secondary antibody (2ug/ml).



Anti-GATA1 antibody (ab40847) at 0.3  $\mu$ g/ml + Human PBMC lysate (35 $\mu$ g protein in RIPA buffer).

**Predicted band size:** 43 kDa **Observed band size:** 48 kDa

Primary incubation was 1 hour. Detected by chemiluminescence.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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