abcam

Product datasheet

Anti-Ikaros antibody [EPR13790] ab191394



ייבע RabMAb

3 References 画像数6

製品の概要

製品名 Anti-lkaros antibody [EPR13790]

製品の詳細 Rabbit monoclonal [EPR13790] to Ikaros

由来種 Rabbit

アプリケーション 適用あり: Flow Cyt (Intra), WB, IHC-P

種交差性 交差種: Mouse, Human

交差が予測される動物種: Rat 4

免疫原 Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

ポジティブ・コントロール Jurkat, Daudi, Raji, Ramos and MOLT4 cell lysates; Human thymus and mouse spleen tissues;

MOLT4 cells.

特記事項 This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity

- Long-term security of supply

- Animal-free production

For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long

term. Avoid freeze / thaw cycle.

バッファー pH: 7.2

Preservative: 0.01% Sodium azide

Constituents: 40% Glycerol, 59% PBS, 0.05% BSA

精製度 Protein A purified

ポリモノ モノクローナル クローン名 EPR13790

アプリケーション

The Abpromise guarantee <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab191394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
Flow Cyt (Intra)		1/130. ab172730 - Rabbit monoclonal lgG, is suitable for use as an isotype control with this antibody.
WB		1/10000 - 1/50000. Detects a band of approximately 50-70 kDa (predicted molecular weight: 58 kDa).
IHC-P		1/1400. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

ターゲット情報

Transcription regulator of hematopoietic cell differentiation (PubMed:17934067). Binds gamma-satellite DNA (PubMed:17135265, PubMed:19141594). Plays a role in the development of lymphocytes, B- and T-cells. Binds and activates the enhancer (delta-A element) of the CD3-delta gene. Repressor of the TDT (fikzfterminal deoxynucleotidyltransferase) gene during thymocyte differentiation. Regulates transcription through association with both HDAC-dependent and HDAC-independent complexes. Targets the 2 chromatin-remodeling complexes, NuRD and BAF (SWI/SNF), in a single complex (PYR complex), to the beta-globin locus in adult erythrocytes. Increases normal apoptosis in adult erythroid cells. Confers early temporal competence to retinal progenitor cells (RPCs) (By similarity). Function is isoform-specific and is modulated by dominant-negative inactive isoforms (PubMed:17135265, PubMed:17934067).

組織特異性

Abundantly expressed in thymus, spleen and peripheral blood Leukocytes and lymph nodes. Lower expression in bone marrow and small intestine.

関連疾患

Defects in IKZF1 are frequent occurrences (28.6%) in acute lymphoblasic leukemia (ALL). Such alterations or deletions lead to poor prognosis for ALL.

Chromosomal aberrations involving IKZF1 are a cause of B-cell non-Hodgkin lymphomas (B-cell

NHL). Translocation t(3;7)(q27;p12), with BCL6.

配列類似性

Belongs to the lkaros C2H2-type zinc-finger protein family.

Contains 6 C2H2-type zinc fingers.

ドメイン

The N-terminal zinc-fingers 2 and 3 are required for DNA binding as well as for targeting lKFZ1 to pericentromeric heterochromatin.

The C-terminal zinc-finger domain is required for dimerization.

翻訳後修飾

Phosphorylation controls cell-cycle progression from late G(1) stage to S stage.

Hyperphosphorylated during G2/M phase. Dephosphorylated state during late G(1) phase. Phosphorylation on Thr-140 is required for DNA and pericentromeric location during mitosis. CK2 is the main kinase, in vitro. GSK3 and CDK may also contribute to phosphorylation of the C-terminal serine and threonine residues. Phosphorylation on these C-terminal residues reduces the DNA-binding ability. Phosphorylation/dephosphorylation events on Ser-13 and Ser-295 regulate

TDT expression during thymocyte differentiation. Dephosphorylation by protein phosphatase 1 regulates stability and pericentromeric heterochromatin location. Phosphorylated in both lymphoid and non-lymphoid tissues (By similarity). Phosphorylation at Ser-361 and Ser-364 downstream of SYK induces nuclear translocation.

Sumoylated. Simulataneous sumoylation on the 2 sites results in a loss of both HDAC-dependent and HDAC-independent repression. Has no effect on pericentromeric heterochromatin location. Desumoylated by SENP1.

Polyubiquitinated.

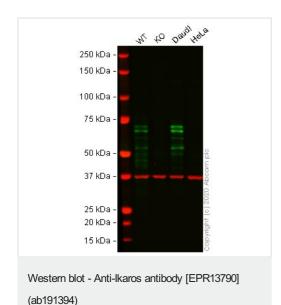
細胞内局在

Cytoplasm; Nucleus. In resting lymphocytes, distributed diffusely throughout the nucleus. Localizes to pericentromeric heterochromatin in proliferating cells. This localization requires DNA binding which is regulated by phosphorylation / dephosphorylation events and Nucleus. In resting lymphocytes, distributed diffusely throughout the nucleus. Localizes to pericentromeric heterochromatin in proliferating cells. This localization requires DNA binding which is regulated by phosphorylation / dephosphorylation events (By similarity).

製品の状態

There are 7 isoforms produced by alternative splicing.

画像



All lanes : Anti-lkaros antibody [EPR13790] (ab191394) at 1/10000 dilution

Lane 1: Wild-type Jurkat (Human T cell leukemia cell line from peripheral blood) whole cell lysate

Lane 2: IKZF1 knockout Jurkat (Human T cell leukemia cell line from peripheral blood) whole cell lysate

Lane 3 : Daudi (Human Burkitt's lymphoma cell line) whole cell lysate

Lane 4 : HeLa (Human epithelial cell line from cervix adenocarcinoma) whole cell lysate

Lysates/proteins at 20 µg per lane.

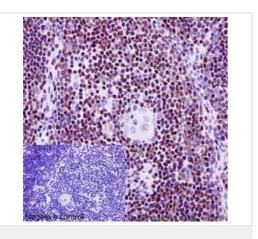
Performed under reducing conditions.

Predicted band size: 58 kDa **Observed band size:** 50-70 kDa

Lanes 1 - 4: Merged signal (red and green). Green - ab191394 observed at 50-70 kDa. Red - loading control <u>ab8245</u> (Mouse anti-GAPDH antibody [6C5]) observed at 37kDa.

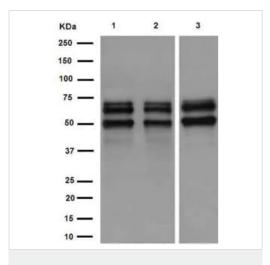
ab191394 was shown to react with Ikaros in wild-type Jurkat cells in western blot with loss of signal observed in IKZF1 knockout sample. Wild-type and IKZF1 knockout Jurkat cell lysates were subjected to

SDS-PAGE. Membranes were blocked in 3% milk in TBS-T (0.1% Tween[®]) before incubation with ab191394 and <u>ab8245</u> (Mouse anti-GAPDH antibody [6C5]) overnight at 4°C at a 1 in 10000 dilution and a 1 in 20000 dilution respectively. Blots were incubated with Goat anti-Rabbit lgG H&L (IRDye[®] 800CW) preabsorbed (<u>ab216773</u>) and Goat anti-Mouse lgG H&L (IRDye[®] 680RD) preabsorbed (<u>ab216776</u>) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Ikaros antibody
[EPR13790] (ab191394)

Immunohistochemical analysis of paraffin-embedded Human thymus tissue labeling Ikaros with ab191394 at 1/1400 dilution followed by pre-diluted HRP Polymer for Rabbit IgG secondary antibody and counter-stained with Hematoxylin. Inset: Negative control: using PBS instead of primary antibody. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Western blot - Anti-Ikaros antibody [EPR13790] (ab191394)

All lanes : Anti-lkaros antibody [EPR13790] (ab191394) at 1/10000 dilution

Lane 1 : Raji cell lysate
Lane 2 : Ramos cell lysate

Lane 3: MOLT4 cell lysate

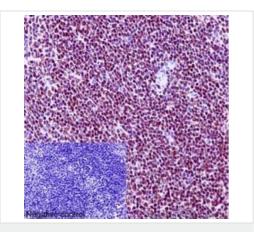
Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit lgG, (H+L), Peroxidase conjugated at 1/1000 dilution

Predicted band size: 58 kDa

Based on the sequence analysis, ab191394 recognizes seven isoforms with the predicted MWs of 58KDa, 48KDa, 48KDa, 48KDa, 43KDa, 41KDa, 32KDa and 53KDa, respectively.

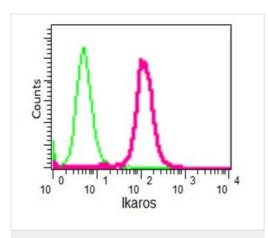


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Ikaros antibody
[EPR13790] (ab191394)

Immunohistochemical analysis of paraffin-embedded Mouse spleen tissue labeling Ikaros with ab191394 at 1/1400 dilution followed by pre-diluted HRP Polymer for Rabbit IgG secondary antibody and counter-stained with Hematoxylin.

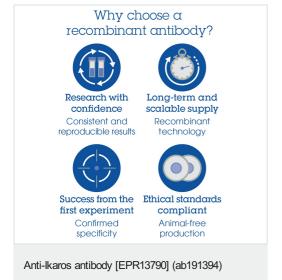
Inset: Negative control: using PBS instead of primary antibody.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Flow Cytometry (Intracellular) - Anti-Ikaros antibody [EPR13790] (ab191394)

Intracellular flow cytometric analysis of MOLT4 cells (paraformaldehyde-fixed, 2%)labeling lkaros with ab191394 at 1/130 dilution (red) or a rabbit lgG (negative) (green), followed by Goat anti rabbit lgG (FITC) secondary at 1/150 dilution.



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

Our Abpromise to you: Quality guaranteed and expert technical support

- · Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- · We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit https://www.abcam.co.jp/abpromise or contact our technical team.

Terms and conditions

• Guarantee only valid for products bought direct from Abcam or one of our authorized distributors