abcam

Product datasheet

Anti-SDF1 antibody [EPR1216] ab155090

יולצעבע RabMAb

★★★★★ 3 Abreviews 21 References 画像数6

製品の概要

製品名 Anti-SDF1 antibody [EPR1216]

Rabbit monoclonal [EPR1216] to SDF1 製品の詳細

由来種 Rabbit

特異性 Mouse cross reactivity based on sequence analysis only. 100% sequence homology for isforms

1-6 (P48061; isoforms 1-6).

This antibody is not suitable for endogenous detection in Western blot application.

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

適用なし: №

種交差性 交差種: Human

交差が予測される動物種: Mouse 4

免疫原 Synthetic peptide within Human SDF1 aa 50 to the C-terminus. The exact sequence is

proprietary.

Database link: P48061

ポジティブ・コントロール Flow Cyt (Intra): Jurkat cells. ICC/IF: Human PBMC cells, Jurkat cells and THP-1 cells. WB:

Human CXCL12 recombinant protein

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**.

Rat: We have preliminary internal testing data to indicate this antibody may not react with this

species. Please contact us for more information.

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.

Avoid freeze / thaw cycle.

バッファー pH: 7.2

Preservative: 0.01% Sodium azide

Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture

supernatant

精製度 Protein A purified

ポリたノ モノクローナル **PRIII PRIII PRIII EPRIII E EPRIII EPRIII**

アイソタイプ IgG

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ab155090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)		1/20. ab172730 - Rabbit monoclonal lgG, is suitable for use as an isotype control with this antibody.
WB		1/10000 - 1/50000. Predicted molecular weight: 11 kDa.
ICC/IF		1/100 - 1/250.

追加情報 Is unsuitable for IP.

ターゲット情報

機能

Chemoattractant active on T-lymphocytes, monocytes, but not neutrophils. Activates the C-X-C chemokine receptor CXCR4 to induce a rapid and transient rise in the level of intracellular calcium ions and chemotaxis. Also binds to atypical chemokine receptor ACKR3, which activates the beta-arrestin pathway and acts as a scavenger receptor for SDF-1. SDF-1-beta(3-72) and SDF-1-alpha(3-67) show a reduced chemotactic activity. Binding to cell surface proteoglycans seems to inhibit formation of SDF-1-alpha(3-67) and thus to preserve activity on local sites. Acts as a positive regulator of monocyte migration and a negative regulator of monocyte adhesion via the LYN kinase. Stimulates migration of monocytes and T-lymphocytes through its receptors, CXCR4 and ACKR3, and decreases monocyte adherence to surfaces coated with ICAM-1, a ligand for beta-2 integrins. SDF1A/CXCR4 signaling axis inhibits beta-2 integrin LFA-1 mediated adhesion of monocytes to ICAM-1 through LYN kinase. Inhibits CXCR4-mediated infection by T-cell line-adapted HIV-1. Plays a protective role after myocardial infarction. Induces downregulation and internalization of ACKR3 expressed in various cells. Has several critical functions during embryonic development; required for B-cell lymphopoiesis, myelopoiesis in bone marrow and heart ventricular septum formation.

組織特異性

Isoform Alpha and isoform Beta are ubiquitously expressed, with highest levels detected in liver, pancreas and spleen. Isoform Gamma is mainly expressed in heart, with weak expression detected in several other tissues. Isoform Delta, isoform Epsilon and isoform Theta have highest

expression levels in pancreas, with lower levels detected in heart, kidney, liver and spleen.

配列類似性 Belongs to the intercrine alpha (chemokine CxC) family.

発生段階 Isoform Alpha is ubiquitously expressed in fetal tissues. Isoform Beta and isoform Delta have

more limited expression patterns, with highest levels detected in fetal spleen and fetal liver,

respectively. Isoform Gamma and isoform Theta are weakly detected in fetal kidney.

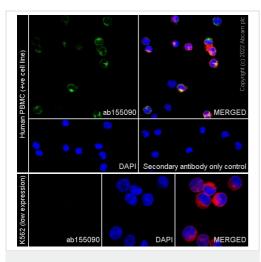
翻訳後修飾 Processed forms SDF-1-beta(3-72) and SDF-1-alpha(3-67) are produced after secretion by

proteolytic cleavage of isoforms Beta and Alpha, respectively. The N-terminal processing is probably achieved by DPP4. Isoform Alpha is first cleaved at the C-terminus to yield a SDF-1-alpha(1-67) intermediate before being processed at the N-terminus. The C-terminal processing of

isoform Alpha is reduced by binding to heparin and, probably, cell surface proteoglycans.

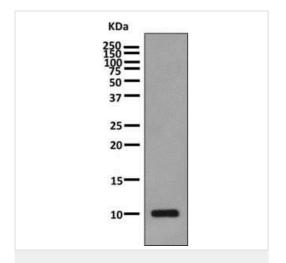
細胞内局在 Secreted.

画像



Immunocytochemistry/ Immunofluorescence - Anti-SDF1 antibody [EPR1216] (ab155090) Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized Human PBMC (Human primary peripheral blood mononuclear cell) cells labelling SDF1 with primary antibody anti-SDF1 (ab155090) at 1/100 dilution, followed by Alexa Fluor[®] 488 Goat anti-Rabbit secondary (ab150077) secondary antibody at 1/1000 dilution. Anti-alpha Tubulin antibody (DM1A) - Microtubule Marker (Alexa Fluor[®] 594) (ab195889) was used to counterstain tubulin at 1/200 dilution. The nuclear counter stain is DAPI (blue). Confocal image showing cytoplasmic staining in Human PBMC. Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).

Low expression control: K562 (PMID: 23473997)



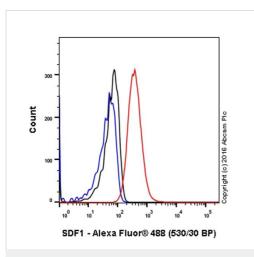
Western blot - Anti-SDF1 antibody [EPR1216] (ab155090)

Anti-SDF1 antibody [EPR1216] (ab155090) at 1/10000 dilution + Human CXCL12 recombinant protein at 0.01 µg

Secondary

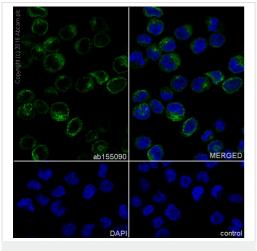
Goat anti-rabbit HRP at 1/2000 dilution

Predicted band size: 11 kDa



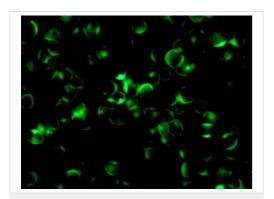
Flow Cytometry (Intracellular) - Anti-SDF1 antibody [EPR1216] (ab155090)

Intracellular Flow Cytometry analysis of Jurkat (human acute T cell leukemia) cells labeling SDF1 with purified ab155090 at 1/20 dilution (10ug/ml) (red). Cells were fixed with 4% paraformaldehyde and permeabilised with 90% methanol. A Goat anti rabbit lgG (Alexa Fluor® 488) (1/2000 dilution) was used as the secondary antibody. Rabbit monoclonal lgG (Black) was used as the isotype control, cells without incubation with primary antibody and secondary antibody (Blue) was used as the unlabeled control.



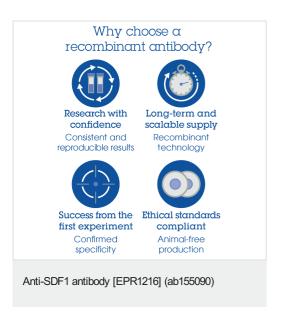
Immunocytochemistry/ Immunofluorescence - Anti-SDF1 antibody [EPR1216] (ab155090)

Immunocytochemistry/Immunofluorescence analysis of THP-1 (Human monocytic leukemia cell line) labeling SDF1 with Purified ab155090 at 1/500 dilution (5 µg/ml). Cells were fixed with 4% PFA and permeabilized with 0.1% tritonX-100. ab150077 Goat anti rabbit lgG(Alexa Fluor[®] 488) at 1/1000 dilution was used as the secondary antibody. Nuclei were counterstained with DAPI. PBS was used instead of the primary antibody as the negative control.



Immunocytochemistry/ Immunofluorescence - Anti-SDF1 antibody [EPR1216] (ab155090)

Immunofluorescent analysis of Jurkat cells, labeling SDF1 with ab155090 at 1/100 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