abcam

Product datasheet

Anti-SDF1 antibody [EPR1216] ab155090

重组 RabMAb

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概述

产品名称	Anti-SDF1抗体[EPR1216]
描述	兔单克隆抗体[EPR1216] to SDF1
宿主	Rabbit
特异性	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.
经测试应用	**适用于:** Flow Cyt (Intra), WB, ICC/IF **不适用于:** IP
种属反应性	**与反应:** Human **预测可用于:** Mouse
免疫原	Synthetic peptide within Human SDF1 aa 50 to the C-terminus. The exact sequence is proprietary. Database link: **P48061**
阳性对照	Flow Cyt (Intra): Jurkat cells. ICC/IF: Human PBMC cells, Jurkat cells and THP-1 cells. WB: Human CXCL12 recombinant protein
常规说明	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.

性能

形式	Liquid

存放说明	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle.
存储溶液	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture supernatant
纯度	Protein A purified
克隆	单克隆
克隆编号	EPR1216
同种型	IgG

应用

The Abpromise guarantee **Abpromise™承诺保证使用ab155090于以下的经测试应用**

"应用说明"部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
Flow Cyt (Intra)		1/20. **ab172730** - Rabbit monoclonal IgG, 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.

应用说明 Is unsuitable for IP.

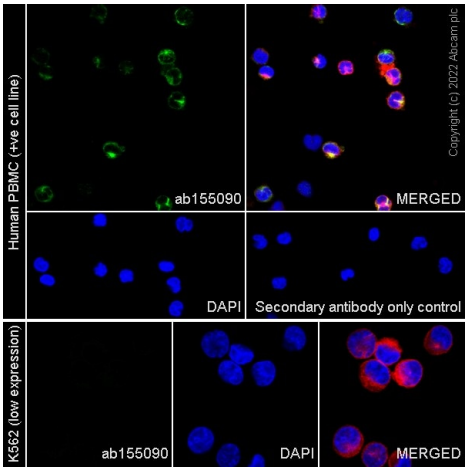
靶标

功能 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 down-regulation 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.

组织特异性 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.
序列相似性	Belongs to the intercrine alpha (chemokine CxC) family.
发展阶段	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.
翻译后修饰	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.
细胞定位	Secreted.

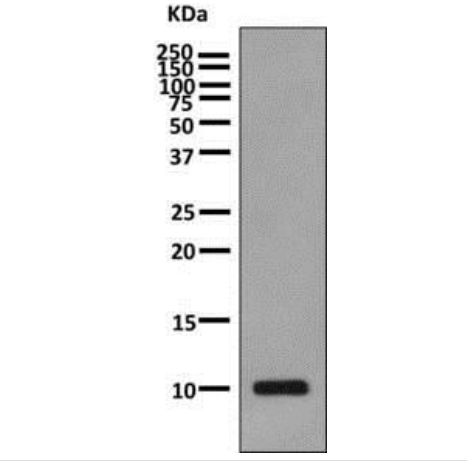
图片



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)



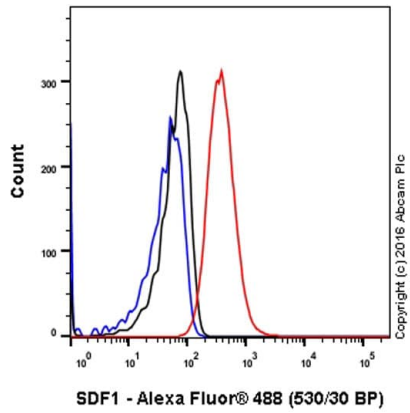
Western blot - Anti-SDF1 antibody [EPR1216] (ab155090)

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

Secondary

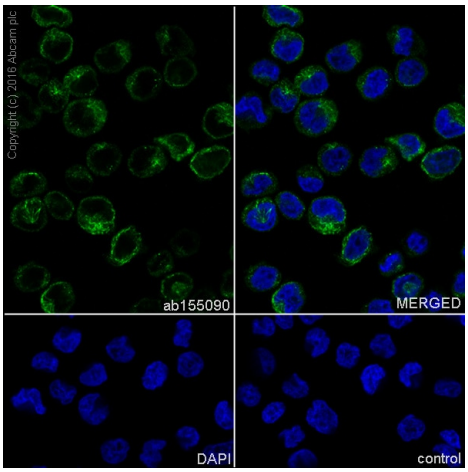
Goat anti-rabbit HRP at 1/2000 dilution

Predicted band size: 11 kDa



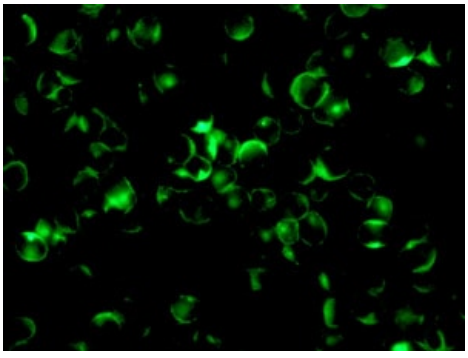
Flow Cytometry (Intracellular) - Anti-SDF1 antibody [EPR1216] (ab155090)

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 IgG (Alexa Fluor® 488) (1/2000 dilution) was used as the secondary antibody. Rabbit monoclonal IgG (Black) was used as the isotype control, cells without incubation with primary antibody and secondary antibody (Blue) was used as the unlabeled control.



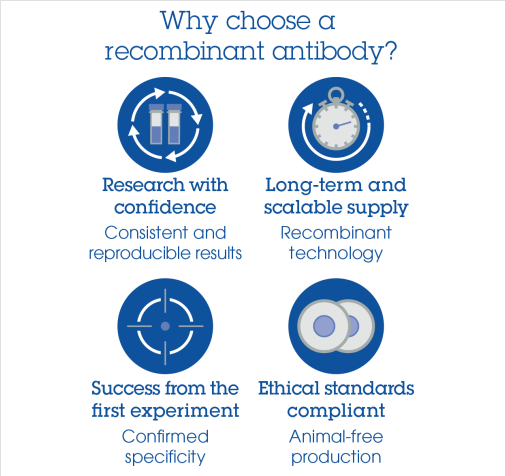
Immunocytochemistry/ Immunofluorescence - Anti-SDF1 antibody [EPR1216] (ab155090)

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 IgG(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.



Anti-SDF1 antibody [EPR1216] (ab155090)

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