abcam

Product datasheet

Anti-SF2 antibody [EPR8239] - BSA and Azide free ab248306

יעלאעבע RabMAb

画像数 10

製品の概要

特記事項

製品名 Anti-SF2 antibody [EPR8239] - BSA and Azide free

製品の詳細 Rabbit monoclonal [EPR8239] to SF2 - BSA and Azide free

由来種 Rabbit

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

種交差性 交差種: Mouse, Rat, Human

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

ab248306 is the carrier-free version of ab129108.

Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cellbased assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar[®] is a trademark of Fluidigm Canada Inc.

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.

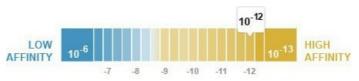
Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Store at +4°C. Do Not Freeze.

解離定数(K_D 値) $K_D = 8.00 \times 10^{-12} M$



Learn more about K_D

バッファー pH: 7.2

Constituent: PBS

キャリア・フリー はい

精製度 Protein A purified

ポリ/モノ モノクローナル **ウローン名** EPR8239

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ab248306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 at an assay dependent concentration.
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. See IHC antigen retrieval protocols.
WB		Use at an assay dependent concentration. Detects a band of approximately 22-32 kDa (predicted molecular weight: 28 kDa).
Flow Cyt (Intra)		Use at an assay dependent concentration.

ターゲット情報

機能 Plays a role in preventing exon skipping, ensuring the accuracy of splicing and regulating

alternative splicing. Interacts with other spliceosomal components, via the RS domains, to form a bridge between the 5'- and 3'-splice site binding components, U1 snRNP and U2AF. Can stimulate binding of U1 snRNP to a 5'-splice site-containing pre-mRNA. Binds to purine-rich RNA

sequences, either the octamer, 5'-RGAAGAAC-3' (r=A or G) or the decamers,

AGGACAGAGC/AGGACGAAGC. Binds preferentially to the 5'-CGAGGCG-3' motif in vitro. Three copies of the octamer constitute a powerful splicing enhancer in vitro, the ASF/SF2 splicing enhancer (ASE) which can specifically activate ASE-dependent splicing. Isoform ASF-2 and

isoform ASF-3 act as splicing repressors.

配列類似性 Belongs to the splicing factor SR family.

ドメイン

Contains 2 RRM (RNA recognition motif) domains.

The RRM 2 domain plays an important role in governing both the binding mode and the phosphorylation mechanism of the RS domain by SRPK1. RS domain and RRM 2 are uniquely positioned to initiate a highly directional (C-terminus to N-terminus) phosphorylation reaction in which the RS domain slides through an extended electronegative channel separating the docking groove of SRPK1 and the active site. RRM 2 binds toward the periphery of the active site and guides the directional phosphorylation mechanism. Both the RS domain and an RRM domain are required for nucleocytoplasmic shuttling.

翻訳後修飾

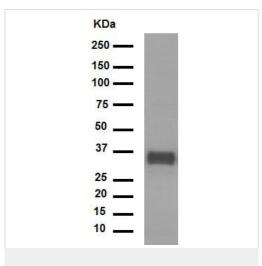
Phosphorylated by CLK1, CLK2, CLK3 and CLK4. Phosphorylated by SRPK1 at multiple serines in its RS domain via a directional (C-terminal to N-terminal) and a dual-track mechanism incorporating both processive phosphorylation (in which the kinase stays attached to the substrate after each round of phosphorylation) and distributive phosphorylation steps (in which the kinase and substrate dissociate after each phosphorylation event). The RS domain of SRSF1 binds to a docking groove in the large lobe of the kinase domain of SRPK1 and this induces certain structural changes in SRPK1 and/or RRM 2 domain of SRSF1, allowing RRM 2 to bind the kinase and initiate phosphorylation. The cycles continue for several phosphorylation steps in a processive manner (steps 1-8) until the last few phosphorylation steps (approximately steps 9-12). During that time, a mechanical stress induces the unfolding of the beta-4 motif in RRM 2, which then docks at the docking groove of SRPK1. This also signals RRM 2 to begin to dissociate, which facilitates SRSF1 dissociation after phosphorylation is completed.

Arg-97 is dimethylated, probably to asymmetric dimethylarginine.

細胞内局在

Cytoplasm. Nucleus speckle. In nuclear speckles. Shuttles between the nucleus and the cytoplasm.

画像



Western blot - Anti-SF2 antibody [EPR8239] - BSA and Azide free (ab248306)

Anti-SF2 antibody [EPR8239] (ab129108) at 1/10000 dilution (purified) + Mouse spleen tissue at 20 µg

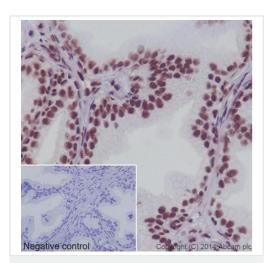
Secondary

Peroxidase-conjugated goat anti-rabbit IgG (H+L) at 1/1000 dilution

Predicted band size: 28 kDa

This data was developed using <u>ab129108</u>, the same antibody clone in a different buffer formulation.

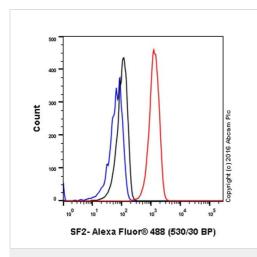
Blocking and dilution buffer: 5% NFDM/TBST.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-SF2 antibody [EPR8239] - BSA and Azide free (ab248306)

This data was developed using <u>ab129108</u>, the same antibody clone in a different buffer formulation.

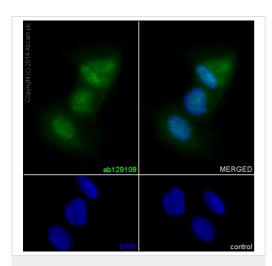
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human prostatic hyperplasia tissue labelling SF2 with purified ab129108 at 1/800. Heat mediated antigen retrieval was performed using Tris/EDTA buffer, pH 9. ab97051, a HRP-conjugated goat anti-rabbit lgG (H+L) was used as the secondary antibody (1/500). Negative control using PBS instead of primary antibody. Counterstained with hematoxylin.



Flow Cytometry (Intracellular) - Anti-SF2 antibody [EPR8239] - BSA and Azide free (ab248306)

This data was developed using <u>ab129108</u>, the same antibody clone in a different buffer formulation.

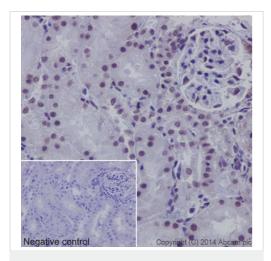
Intracellular Flow Cytometry analysis of HeLa cells labelling SF2 with purified <u>ab129108</u> at a dilution of 1/70 (red). Cells were fixed with 4% paraformaldehyde and permeabilized with 90% methanol. An Alexa Flour[®] 488-conjugated goat anti-rabbit lgG (1/2000) was used as the secondary antibody. Black - Isotype control, rabbit monoclonal lgG. Blue - Unlabelled control, cells without incubation with primary and secondary antibodies.



Immunocytochemistry/ Immunofluorescence - Anti-SF2 antibody [EPR8239] - BSA and Azide free (ab248306)

This data was developed using <u>ab129108</u>, the same antibody clone in a different buffer formulation.

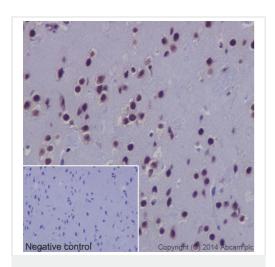
Immunocytochemistry/Immunofluorescence analysis of HeLa cells labelling SF2 with purified **ab129108** at 1/150. Cells were fixed with 4% paraformaldehyde and permeabilized with 0.1% Triton X-100. **ab150077**, an Alexa Fluor[®] 488-conjugated goat anti-rabbit lgG (1/500) was used as the secondary antibody. Counterstained with DAPI.Control - primary antibody (1/150), secondary antibody **ab150120** an Alexa Fluor[®] 594-conjugate goat anti-mouse lgG (1/500).



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-SF2 antibody [EPR8239] - BSA and Azide free (ab248306)

This data was developed using <u>ab129108</u>, the same antibody clone in a different buffer formulation.

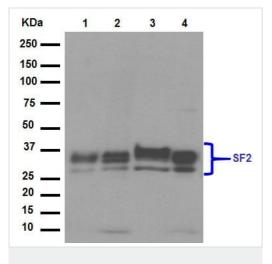
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of rat kidney tissue labelling SF2 with purified **ab129108** at 1/800. Heat mediated antigen retrieval was performed using Tris/EDTA buffer, pH 9. **ab97051**, a HRP-conjugated goat anti-rabbit lgG (H+L) was used as the secondary antibody (1/500). Negative control using PBS instead of primary antibody. Counterstained with hematoxylin.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-SF2 antibody [EPR8239] - BSA and Azide free (ab248306)

This data was developed using <u>ab129108</u>, the same antibody clone in a different buffer formulation.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of mouse cerebral cortex tissue labelling SF2 with purified <u>ab129108</u> at 1/800. Heat mediated antigen retrieval was performed using Tris/EDTA buffer, pH 9. <u>ab97051</u>, a HRP-conjugated goat anti-rabbit lgG (H+L) was used as the secondary antibody (1/500). Negative control using PBS instead of primary antibody. Counterstained with hematoxylin.



Western blot - Anti-SF2 antibody [EPR8239] - BSA and Azide free (ab248306)

All lanes : Anti-SF2 antibody [EPR8239] (**ab129108**) at 1/10000 dilution (purified)

Lane 1: HepG2 cell lysate

Lane 2: Raji cell lysate

Lane 3 : HeLa cell lysate

Lane 4: 293T cell lysate

Lysates/proteins at 20 µg per lane.

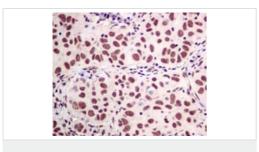
Secondary

All lanes : Peroxidase conjugated goat anti-rabbit lgG (H+L) at 1/1000 dilution

Predicted band size: 28 kDa

This data was developed using <u>ab129108</u>, the same antibody clone in a different buffer formulation.

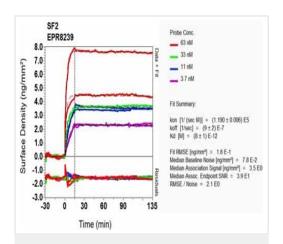
Blocking and dilution buffer: 5% NFDM/TBST.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-SF2 antibody [EPR8239]

- BSA and Azide free (ab248306)

This data was developed using <u>ab129108</u>, the same antibody clone in a different buffer formulation.lmmunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human breast carcinoma tissue labelling SF2 with unpurified <u>ab129108</u> at 1/100. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

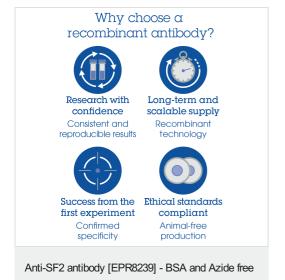


Ol-RD Scanning - Anti-SF2 antibody [EPR8239] - BSA and Azide free (ab248306)

This data was developed using $\underline{ab129108}$, the same antibody clone in a different buffer formulation. Equilibrium disassociation constant (K_D)

Learn more about KD

Click here to learn more about K_D



(ab248306)

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