abcam

ab248619

Anti-SF2 antibody [EPR8240] - BSA and Azide free

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Carrier free	Yes
Clone number	EPR8240
Purification technique	Affinity purification Protein A
Dissociation constant	5.7 x 10^{-11} M
Concentration	0.999 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IHC-P

Tested

Species	Human
Dilution info	-

Notes	-

Not recommended

Species	Mouse, Rat
Dilution info	-
Notes	-

IP

Not recommended

Species	Mouse, Rat, Human
Dilution info	-
Notes	-

WB

Expected

Species	Mouse, Rat, Human
Dilution info	Use at an assay dependent concentration.
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	-
Notes	-

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	-
Notes	-

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

Target data

See full target information SRSF1

Function 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. May function as export adapter involved in mRNA nuclear export through the TAP/NXF1 pathway.

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C
Storage information	Do Not Freeze

Notes

ab248619 is the carrier-free version of ab133689.

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

What are the advantages of a recombinant monoclonal antibody?
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 batch production

For more information, read more on recombinant antibodies.

Conjugation ready
Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based 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.

Compatibility
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.

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	SF2 also known as Splicing Factor 2 or Alternative Splicing Factor 1 (ASF1) is a prototypical member of the SR protein family involved in mRNA splicing. It is approximately 33 kDa in mass. SF2 is expressed ubiquitously in the nucleus of eukaryotic cells where it plays a central role in the regulation of constitutive and alternative splicing processes.
Biological function summary	SF2 acts as an important regulator of gene expression by facilitating the splicing of pre-mRNA participating in spliceosome assembly. It interacts with other splicing factors and RNA to form spliceosomal complexes essential for splicing fidelity and efficiency. The precise modulation of splicing by SF2 allows for the generation of diverse protein isoforms from a single gene contributing to protein diversity within the cell.
Pathways	SF2 integrates into the RNA splicing pathway and is critical for splice site selection. It interacts with proteins such as U1 snRNP and U2AF65 influencing their binding to pre-mRNA. SF2 also plays roles in other key pathways like mRNA transport and translation thereby linking the splicing machinery with nuclear export and protein synthesis processes.

Associated diseases and disorders	Abnormalities in SF2 levels or functions have been linked to various cancers and spinal muscular atrophy (SMA). Cancer cells often show altered SF2 expression leading to splicing anomalies that promote tumorigenesis. Additionally SF2's interaction with proteins like hnRNP A1 influences disease mechanisms as splicing factor dysregulation can disrupt normal cellular processes and facilitate the progression of disorders such as SMA.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

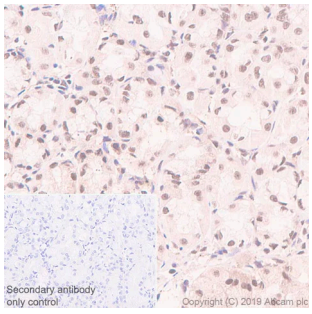
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

3 product images

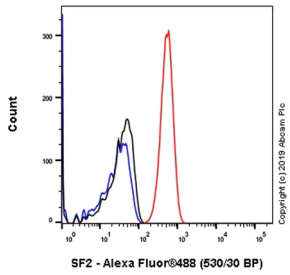


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SF2 antibody [EPR8240] - BSA and Azide free (ab248619)

SF2 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-SF2 antibody

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human stomach tissue sections labeling SF2 with Purified ab133689 at 1/100 dilution (4.16 µg/ml). Heat mediated antigen retrieval was performed perform heat mediated antigen retrieval using Citrate buffer, pH 6.0. ImmunoHistoProbe one step HRP Polymer (ready to use) was used as the secondary

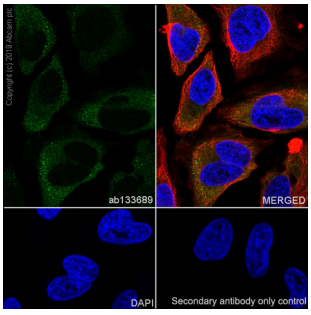
antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab133689)



Flow Cytometry (Intracellular) - Anti-SF2 antibody [EPR8240] - BSA and Azide free (ab248619)

SF2 Flow Cytometry (Intracellular) staining using rabbit Anti-SF2 antibody

Intracellular Flow Cytometry analysis of HeLa (Human cervix adenocarcinoma epithelial cell) cells labeling SF2 with purified ab133689 at 1/40 dilution (10µg/ml) (Red). Cells were fixed with 4% Paraformaldehyde and permeabilised with 90% Methanol. A Goat anti rabbit IgG (Alexa Fluor® 488, ab150077) secondary antibody was used at 1/2000. Isotype control - Rabbit monoclonal IgG (Black). Unlabeled control - Cell without incubation with primary antibody and secondary antibody (Blue).
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab133689)



Immunocytochemistry/ Immunofluorescence - Anti-SF2 antibody [EPR8240] - BSA and Azide free (ab248619)

SF2 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-SF2 antibody

Immunocytochemistry/ Immunofluorescence analysis of HeLa (Human cervix adenocarcinoma epithelial cell) cells labeling SF2 with purified ab133689 at 1/50 dilution (8.3 µg/ml). Cells were fixed in 4% Paraformaldehyde and permeabilized with 0.1% tritonX-100. Cells were counterstained with ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1/200 (2.5 µg/ml). Goat anti rabbit IgG (Alexa Fluor® 488, ab150077) was used as the secondary antibody at 1/1000 (2 µg/ml) dilution. DAPI (blue) was used as nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (anti sf2 antibody epr8240 immunocytochemistry hela human)

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.