abcam

ab222118

Alexa Fluor® 488 Anti-SC35 antibody [EPR12238]

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Conjugation	Alexa Fluor® 488
Excitation/Emission	Ex: 495nm, Em: 519nm
Storage buffer	pH: 7.4 Preservative: 0.02% Sodium azide Constituents: PBS, 30% Glycerol (glycerin, glycerine), 1% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EPR12238
Purification technique	Affinity purification Protein A
Concentration	0.5 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

ICC/IF

Tested

Species	Human

Dilution info	1/100
Notes	This product gave a positive signal in HeLa cells fixed with 4% formaldehyde (10 min)

Flow Cyt (Intra)

Expected

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

IHC-P

Expected

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

Target data

See full target information SRSF2

Function	Necessary for the splicing of pre-mRNA. It is required for formation of the earliest ATP-dependent splicing complex and interacts with spliceosomal components bound to both the 5'- and 3'-splice sites during spliceosome assembly. It also is required for ATP-dependent interactions of both U1 and U2 snRNPs with pre-mRNA. 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. Binds to purine-rich RNA sequences, either 5'-AGSAGAGTA-3' (S=C or G) or 5'-GTTCGAGTA-3'. Can bind to beta-globin mRNA and commit it to the splicing pathway. The phosphorylated form (by SRPK2) is required for cellular apoptosis in response to cisplatin treatment.

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage duration	1-2 weeks

Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle, Store in the dark

Notes

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.

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Supplementary info

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

Activity summary	SC35 also known as SRSF2 (serine/arginine-rich splicing factor 2) is an essential splicing factor with a molecular mass around 26 kDa. This protein is part of the SR protein family which are known for their roles in splicing regulation due to their serine/arginine-rich domains. SC35 predominantly localizes in the nucleus of cells where it accumulates in nuclear speckles areas rich in splicing factors. Biologists often use immunofluorescence techniques and anti-SC antibodies to visualize and study SC35's localization and function within cells.

Biological function summary	SC35 influences various aspects of mRNA processing particularly pre-mRNA splicing. The protein functions as a splicing enhancer by interacting with pre-mRNA at specific sites to assist exon inclusion during splicing. SC35 acts as part of the spliceosomal complex which is critical during the assembly and rearrangement of the spliceosome. Additionally it interacts with other splicing factors to ensure accurate and efficient splicing which is fundamental for gene expression and consequent protein synthesis.
Pathways	The SC35 protein participates in the RNA splicing pathway a significant process in mRNA maturation and gene expression regulation. This protein interacts with other SR proteins like SRSF1 and components of the spliceosomal machinery. SC35's function is also important in the alternative splicing pathway impacting the diversity of mRNA transcripts through the production of different exon combinations. By regulating alternative splicing SC35 helps produce protein diversity vital for numerous cellular processes.
Associated diseases and disorders	Changes in SC35 expression or function have been linked to several human conditions. Notably its dysregulation can contribute to cancer development through altered splicing patterns that impact oncogene and tumor suppressor gene expression. Furthermore SC35 abnormalities are associated with spinal muscular atrophy a neurodegenerative disorder where splicing regulation plays a significant role. In these diseases SC35 may interact with other proteins such as SMN (survival of motor neuron protein) and impact their functions highlighting its relevance in maintaining cellular health.

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

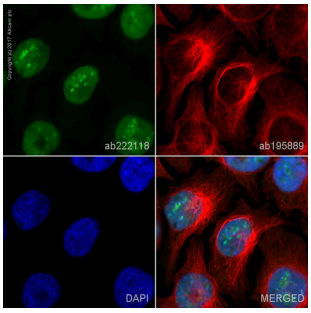
We do not recommend this combination. It is not covered by our product promise.

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.

1 product image



Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 488 Anti-SC35 antibody [EPR12238] (ab222118)

SC35 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-SC35 antibody

ab222118 staining SC35 in HeLa cells. The cells were fixed with 4% formaldehyde (10 min), permeabilized with 0.1% Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated overnight at +4°C with ab222118 at 1/100 dilution (shown in green) and ab195889, Mouse monoclonal to alpha Tubulin (Alexa Fluor® 594), at 1/250 dilution (shown in red). Nuclear DNA was labelled with DAPI (shown in blue).
Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).

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