abcam

ab240269

Anti-FRS2 antibody [EPR14724] - 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	EPR14724
Purification technique	Affinity purification Protein A
Concentration	1.052 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IP

Tested

Species	Human
Dilution info	-
Notes	-

WB

Expected

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

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	-
Notes	ab199376 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

Target data

See full target information FRS2

Function	Adapter protein that links activated FGR and NGF receptors to downstream signaling pathways. Plays an important role in the activation of MAP kinases and in the phosphorylation of PIK3R1, the regulatory subunit of phosphatidylinositol 3-kinase, in response to ligand-mediated activation of FGFR1. Modulates signaling via SHC1 by competing for a common binding site on NTRK1.

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

ab240269 is the carrier-free version of ab183492.

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	FRS2 also known as Fibroblast growth factor receptor substrate 2 functions as an adaptor protein in cellular signal transduction. This protein with a molecular mass of approximately 60 kDa plays a critical role in linking receptor tyrosine kinases specifically FGFR (Fibroblast Growth Factor Receptor) to downstream signaling pathways. FRS2 primarily expresses in various tissues with notable expression in neural and epithelial cells. Its function involves phosphorylation and the recruitment of downstream signaling molecules which propagate cellular response signals.
Biological function summary	FRS2 integrates into several signaling complexes that regulate key cellular processes. It acts as a scaffold protein creating platforms for the assembly of signaling complexes such as those involving Grb2 (Growth factor receptor-bound protein 2) and Sos (Son of Sevenless). These complexes mediate processes related to cell differentiation proliferation and survival. The protein's ability to anchor and direct these signaling molecules highlights its importance within cellular mechanisms where it influences signaling cascades leading to specific cellular outcomes.
Pathways	The role of FRS2 is essential in the FGFR and MAPK/ERK pathways. Within these pathways FRS2 interacts closely with proteins like FGFR facilitating their activation and consequent downstream signaling events. Through these interactions the

	protein influences pathways involved in developmental processes and cellular maintenance. FRS2 by enabling FGFR signal transduction significantly impacts cellular responses to external growth stimuli making it an important player in normal cellular function and development.
Associated diseases and disorders	Abnormalities in FRS2 function or expression link to certain pathologies including cancer and neurological disorders. For instance overactivation of FRS2-mediated signaling pathways can contribute to oncogenic processes leading to uncontrolled cell growth and proliferation. Furthermore mutations affecting FRS2 interaction with FGFR have implications in developmental disorders characterized by neural defects. Understanding FRS2 connections in these diseases helps in identifying potential therapeutic targets for treatment interventions.

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

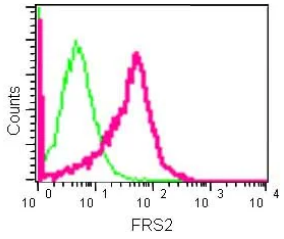
We do not recommend this combination. It is not covered by our product promise.

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.

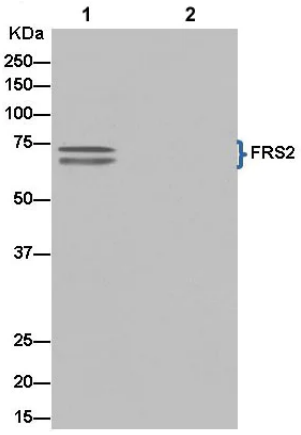
2 product images



Flow Cytometry (Intracellular) - Anti-FRS2 antibody [EPR14724] - BSA and Azide free (ab240269)

FRS2 Flow Cytometry (Intracellular) staining using rabbit Anti-FRS2 antibody

Intracellular flow cytometric analysis of 2% paraformaldehyde-fixed SH-SY5Y cells labeling FRS2 with ab183492 at 1/20 dilution (red), compared to a Rabbit monoclonal IgG isotype control (green), followed by Goat anti rabbit IgG (FITC) secondary antibody at 1/150 dilution.
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab183492).



Immunoprecipitation - Anti-FRS2 antibody [EPR14724] - BSA and Azide free (ab240269)

Western blot analysis of FRS2 in Human fetal brain lysate immunoprecipitated using ab183492 at 1/50 dilution (Lane 1). Lane 2: TBS instead of Human fetal brain lysate.
Secondary: Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG at 1/1500 dilution.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab183492).

All lanes:
Immunoprecipitation - Anti-FRS2 antibody [EPR14724] (ab183492)

Predicted band size: 57 kDa

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