abcam

ab183492

Anti-FRS2 antibody [EPR14724]

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EPR14724
Purification technique	Affinity purification Protein A
Concentration	0.134 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IP

Tested

Species	Human
Dilution info	1/50 - 1/70
Notes	-

WB

Tested

Species	Human
Dilution info	1/1000 - 1/10000
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/20
Notes	ab172730 - 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	Conditional Ambient
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

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.

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

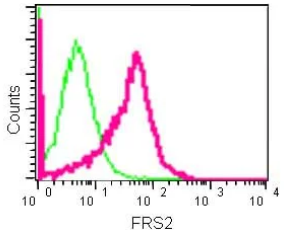
We do not recommend this combination. It is not covered by our product promise.

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.

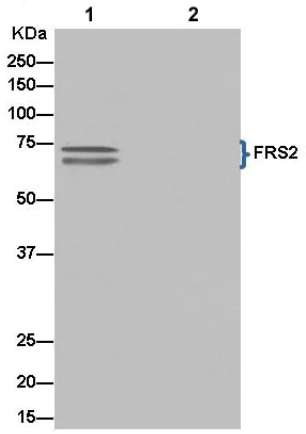
4 product images



Flow Cytometry (Intracellular) - Anti-FRS2 antibody [EPR14724] (ab183492)

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

Intracellular flow cytometric analysis of 2% paraformaldehyde-fixedSH-SY5Y cells labeling FRS2 with ab183492 at 1/20 dilution (red), compared to aRabbit monoclonal IgG isotype control (green), followed byGoat anti rabbit IgG (FITC) secondary antibody at 1/150 dilution.

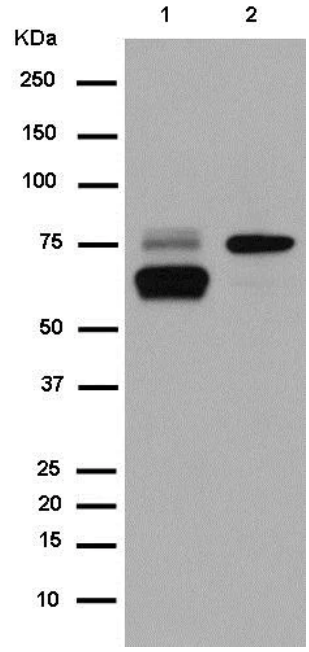


Immunoprecipitation - Anti-FRS2 antibody [EPR14724] (ab183492)

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.

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

Predicted band size: 57 kDa



Western blot - Anti-FRS2 antibody [EPR14724] (ab183492)

All lanes:
Western blot - Anti-FRS2 antibody [EPR14724] (ab183492) at 1/10000 dilution

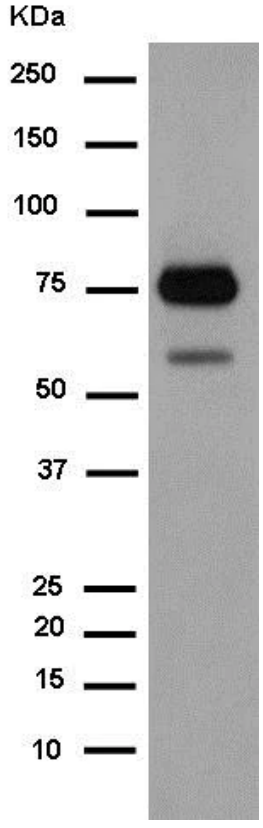
Lane 1:
Human fetal brain lysate at 20 µg

Lane 2:
HeLa cell lysate at 20 µg

Secondary

All lanes:
Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugate at 1/1000 dilution

Predicted band size: 57 kDa



Western blot - Anti-FRS2 antibody [EPR14724] (ab183492)

All lanes:
Western blot - Anti-FRS2 antibody [EPR14724] (ab183492) at 1/2000 dilution

All lanes:
SH-SY5Y cell lysate at 10 µg

Secondary

All lanes:
Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugate at 1/1000 dilution

Predicted band size: 57 kDa

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