abcam

ab273582

Anti-FRZB antibody [EPR23904-20]

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 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	EPR23904-20
Purification technique	Affinity purification Protein A
Concentration	0.528 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IP

Tested

Species	Mouse
Dilution info	1/30
Notes	-

Not recommended

Species	Human, Rat
Dilution info	-
Notes	-

WB

Tested

Species	Mouse
Dilution info	1/1000
Notes	-

Not recommended

Species	Human, Rat
Dilution info	-
Notes	-

IHC-P

Not recommended

Species	Mouse, Rat, Human
Dilution info	-
Notes	-

ICC/IF

Tested

Species	Mouse
Dilution info	1/50
Notes	-

Not recommended

Species	Human, Rat
Dilution info	-
Notes	-

IHC-Fr

Not recommended

Species	Mouse, Rat, Human
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Mouse
Dilution info	1/50
Notes	-

Not recommended

Species	Human, Rat
Dilution info	-
Notes	-

Target data

See full target information Frzb

Function Soluble frizzled-related proteins (sFRPS) function as modulators of Wnt signaling through direct interaction with Wnts. They have a role in regulating cell growth and differentiation in specific cell types. SFRP3/FRZB appears to be involved in limb skeletogenesis. Antagonist of Wnt8 signaling. Regulates chondrocyte maturation and long bone development (By similarity).

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	FRZB also known as secreted frizzled-related protein 3 (SFRP3) functions as a modulator of Wnt signaling pathways. This protein has a mass of approximately 36 kDa and serves as an antagonist to the Wnt proteins by binding to them preventing their interaction with cell surface receptors. FRZB is expressed in several tissues with notable levels in cartilage bone and the heart.
Biological function summary	The modulation of Wnt signaling by FRZB plays a significant role in embryonic development and tissue homeostasis. FRZB is not part of a protein complex but has important interactions with other components of the signaling cascade. It influences cell differentiation proliferation and apoptosis which are critical processes during development and tissue repair.
Pathways	FRZB influences both Wnt/β-catenin and non-canonical Wnt pathways. Its interaction with these pathways regulates signal transmission that affects cellular

behaviors. Related proteins include Wnt ligands and frizzled receptors which are central to these signaling mechanisms.

Associated diseases and disorders

Abnormalities in FRZB expression or function show a connection to osteoarthritis and certain cancers. In osteoarthritis FRZB interacts with Wnt proteins which contribute to the degradation of cartilage. In cancer dysregulation of Wnt signaling involving FRZB can lead to unchecked cell proliferation. Understanding its role in these diseases can aid in developing therapeutic strategies.

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

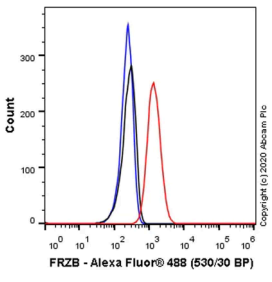
We do not recommend this combination. It is not covered by our product promise.

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

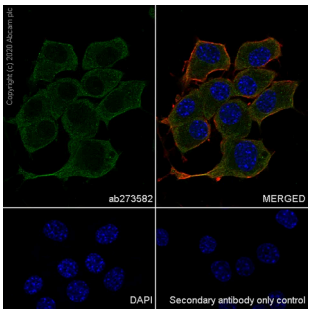


Flow Cytometry (Intracellular) - Anti-FRZB antibody [EPR23904-20] (ab273582)

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

Intracellular flow cytometric analysis of 4% paraformaldehyde fixed, 90% methanol permeabilized Neuro-2a (Mouse neuroblastoma neuroblast) cells labelling FRZB with ab273582 at 1/50 dilution (1ug) (Red) (Red) compared with a Rabbit monoclonal IgG (ab172730) (Black) isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue).

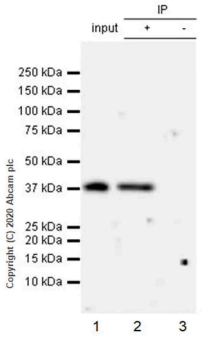
A Goat anti rabbit IgG (Alexa Fluor® 488, ab150077) at 1/2000 dilution was used as the secondary antibody.



Immunocytochemistry/ Immunofluorescence - Anti-FRZB antibody [EPR23904-20] (ab273582)

FRZB Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-FRZB antibody

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized Neuro-2a cells labelling FRZB with ab273582 at 1/50 dilution, followed by ab150077 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) antibody at 1/1000 dilution (Green). Confocal image showing cytoplasmic staining in Neuro-2a cell line. ab195889 Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 dilution (Red). The Nuclear counterstain was DAPI (Blue).
Secondary antibody only control: Secondary antibody is ab150077 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) at 1/1000 dilution.



Immunoprecipitation - Anti-FRZB antibody [EPR23904-20] (ab273582)

FRZB was immunoprecipitated from 0.35 mg Mouse testis tissue lysate with ab273582 at 1/30 dilution (2ug in 0.35mg lysates). Western blot was performed on the immunoprecipitate using ab273582 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP)(ab131366) was used at 1/5000 dilution.
Lane 1: Mouse testis tissue lysate 10 ug

Lane 2: ab273582 IP in Mouse testis tissue lysate

Lane 3: Rabbit monoclonal IgG (ab172730) instead of ab273582 in mouse testis tissue lysate

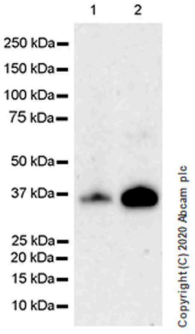
Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 3 minutes

All lanes:
Immunoprecipitation - Anti-FRZB antibody [EPR23904-20] (ab273582)

Predicted band size: 36 kDa

Observed band size: 36 kDa



Western blot - Anti-FRZB antibody [EPR23904-20] (ab273582)

Blocking and diluting buffer and concentration: 5% NFDM/TBST.
The molecular weight observed is consistent with what has been described in the literature (PMID: 28300015).

Exposure time: 3 minutes.

All lanes:
Western blot - Anti-FRZB antibody [EPR23904-20] (ab273582) at 1/1000 dilution

Lane 1:
Mouse brain tissue lysate at 20 µg

Lane 2:
Mouse testis tissue lysate at 20 µg

Secondary

All lanes:
Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ab97051) at 1/20000 dilution

Predicted band size: 36 kDa

Observed band size: 36 kDa

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