abcam

ab95619

PE Anti-DR5 antibody [MD5-1]

Anti-DR5 antibody [MD5-1] conjugated to PE - suitable for flow cytometry, and reacts with mouse samples. Clone [MD5-1] is a Armenian Hamster monoclonal antibody cited in 7 publications.

Design your panel with our interactive flow cytometry panel builder. Click here.

Key facts

Isotype	IgG
Host species	Armenian hamster
Conjugation	PE
Excitation/Emission	Ex: 480;565nm, Em: 578nm
Storage buffer	pH: 7.2 Preservative: 0.09% Sodium azide Constituents: PBS, 0.87% Sodium chloride
Form	Liquid
Clonality	Monoclonal
Immunogen	Full Length Protein corresponding to Mouse Tnfrsf10b. The exact immunogen used to generate this antibody is proprietary information. Database link Q9QZM4
Clone number	MD5-1
Purification technique	Affinity purification Protein G
Concentration	0.2 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

Flow Cyt

Tested

Species	Mouse
Dilution info	0.125-0.25 µg for 10^5-10^8 Cells
Notes	Staining the cell sample in a final volume of 100 µl is recommended. ab101026 - Armenian Hamster monoclonal IgG, is suitable for use as an isotype control with this antibody.

Target data

See full target information Tnfrsf10b

Function	Receptor for the cytotoxic ligand TNFSF10/TRAIL. The adapter molecule FADD recruits caspase-8 to the activated receptor. The resulting death-inducing signaling complex (DISC) performs caspase-8 proteolytic activation which initiates the subsequent cascade of caspases (aspartate-specific cysteine proteases) mediating apoptosis. Promotes the activation of NF-kappa-B. Essential for ER stress-induced apoptosis.

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C

Supplementary info

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

Activity summary	DR5 also known as Death Receptor 5 TRAIL-R2 or TNFRSF10B is a protein critical in apoptosis. It is a transmembrane receptor with a mass of approximately 54 kDa. Researchers find it expressed mostly in tissues such as lung colon and prostate. DR5 functions by binding to its ligand TRAIL triggering the extrinsic apoptotic pathway. Through this mechanism DR5 initiates a cascade of caspase activation that leads to cell death.
Biological function summary	DR5 plays a significant role in the regulation of apoptosis particularly in cancer cells. It is a component of the TRAIL receptor complex which includes several other death receptors like DR4. This complex formation allows DR5 to mediate apoptotic signals more efficiently. By controlling apoptosis DR5 helps maintain tissue homeostasis and prevents abnormal cell proliferation.
Pathways	DR5 is an important part of the TRAIL signaling pathway and the extrinsic apoptosis pathway. It connects with proteins like FADD and Caspase-8 essential in

	the apoptotic signaling cascade. By interacting with these proteins DR5 drives the progression of the apoptotic signal ensuring the removal of dysfunctional cells. Such pathways are vital for restraining tumor development and progression.
Associated diseases and disorders	DR5 exhibits significant relevance to cancer and autoimmune diseases. Its ability to induce apoptosis through the TRAIL pathway keeps oncogenic transformations in check. In cancer DR5 often interfaces with other proteins like Bcl-2 which are involved in cell survival. Furthermore defects or aberrant expressions in DR5 have associations with autoimmune disorders where excessive cell death or survival contributes to disease pathology. DR5's role in these conditions makes it a promising target in 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

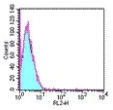
We do not recommend this combination. It is not covered by our product promise.

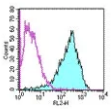
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

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.

1 product image





Flow Cytometry - PE Anti-DR5 antibody [MD5-1] (ab95619)

DR5 Flow Cytometry staining using armenian hamster Anti-DR5 antibody

Flow cytometry staining of non-transfected (left) and mouse DR5 transfected (right) BHK cells with 0.125 µg of Golden Syrian Hamster IgG Isotype Control PE (open histogram) or 0.125 µg of ab95619 (filled histogram). Total viable cells were used for analysis.

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