abcam

ab279590

PE Anti-Syndecan 4 antibody [112]

Recombinant

Key facts

Isotype	IgG
Host species	Rabbit
Conjugation	PE
Excitation/Emission	Ex: 480;565nm, Em: 578nm
Storage buffer	Preservative: 0.09% Sodium azide Constituents: 99.41% Deionized Water (H20), 0.5% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	Recombinant Full Length Protein corresponding to Mouse Sdc4. Database link O35988
Clone number	112
Purification technique	Affinity purification Protein A
Concentration	0.1 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

Flow Cyt

Tested

Species	Mouse

Dilution info	-
Notes	Concentration: 2 µl/Test, 0.1 mg/ml

Target data

See full target information Sdc4

Function	Cell surface proteoglycan which regulates exosome biogenesis in concert with SDCBP and PDCD6IP.

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C
Storage information	Store in the dark

Notes

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	Syndecan 4 also known as SDC4 is a transmembrane heparan sulfate proteoglycan with a molecular mass of around 30 kDa. It functions mechanically by interacting with the extracellular matrix via its heparan sulfate chains which are critical for binding growth factors and other matrix molecules. Syndecan 4 is ubiquitously expressed in many cell types including fibroblasts and epithelial cells playing a role in cell adhesion and migration.

Biological function summary	Syndecan 4 contributes to cell signaling and cytoskeletal organization. This proteoglycan acts as an essential co-receptor for various growth factors facilitating their interaction with their receptors on the cell surface. By doing so it supports cell proliferation and repair processes and it's also known to interact with integrins to modulate cell adhesion. Syndecan 4 does not function alone; it forms part of complexes with other cell surface receptors and interacts with key signaling molecules inside cells.
Pathways	Syndecan 4 is integral in the regulation of several signal transduction pathways such as the protein kinase C (PKC) and Rho family GTPase pathways. These pathways are essential for modulating cellular responses to mechanical stress and changes in the extracellular environment. Syndecan 4 works closely with proteins such as fibronectin and integrins within these pathways to distribute mechanical signals appropriately across the cell membrane linking the extracellular matrix to intracellular processes.
Associated diseases and disorders	Syndecan 4 has strong associations with conditions like cancer and arthritis. In cancer altered Syndecan 4 expression can impact tumor cell proliferation and metastasis often in concert with matrix metalloproteinases which remodel the extracellular matrix environment to facilitate invasion. In arthritis Syndecan 4 plays a role in inflammatory processes where its interactions with cytokines and other cell-surface proteins can influence cartilage degradation and joint inflammation.

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

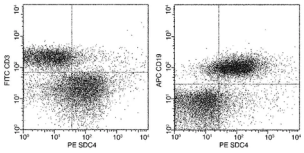
We do not recommend this combination. It is not covered by our product promise.

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-Syndecan 4 antibody [112] (ab279590)

Syndecan 4 Flow Cytometry staining using rabbit Anti-Syndecan 4 antibody

Flow cytometric analysis of mouse SDC4 expression on mouse splenocytes. BALB/c splenocytes were stained with PE-conjugated anti-Mouse SDC4 ab279590 and FITC-conjugated anti-Mouse CD3 (left) or APC-conjugated anti-Mouse CD19 (right).

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