abcam

ab77869

Anti-Cytokeratin 3/CK-3 antibody [AE5]

Key facts

Isotype	IgG1
Host species	Mouse
Storage buffer	Preservative: 0.1% Sodium azide Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	AE5
Purification technique	Affinity purification Protein G
Concentration	1 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	2 µg for 10^6 Cells
Notes	-

Predicted

Species	Cow, Rabbit
Dilution info	-
Notes	-

WB

Expected

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

Predicted

Species	Cow, Rabbit
Dilution info	-
Notes	-

IHC-P

Expected

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

Predicted

Species	Cow, Rabbit
Dilution info	-
Notes	-

ICC/IF

Expected

Species	Human

Dilution info	Use at an assay dependent concentration.
Notes	-

Predicted

Species	Cow, Rabbit
Dilution info	-
Notes	-

Target data

See full target information KRT3

Storage

Shipped at conditions	Blue Ice
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

Supplementary info

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

Activity summary	Cytokeratin 3 also known as CK-3 or CK3 is a type II cytokeratin protein with a molecular weight of approximately 64 kDa. This protein often coexists with Cytokeratin 12 and together they form the epithelial keratins. CK-3 is expressed predominantly in corneal epithelial cells. The presence of CK-3 in these cells helps maintain structural integrity and resilience against mechanical stress through its network of intermediate filaments. Various forms like CK-3 IgG and IGG CK3 have been studied to understand the unique and important role of cytokeratins in epithelial tissues.
Biological function summary	CK-3 plays an important role in the structural framework inside corneal epithelial cells. It participates in forming a complex of intermediate filaments providing necessary strength and stability to the cells. Such a framework is important for

	protecting the epithelium under physical stressors while also supporting the dynamic processes of cell proliferation and differentiation. These cytokeratin complexes contribute to the cellular process by supporting the resilience of epithelial cells.
Pathways	The involvement of CK-3 in cytoskeletal organization highlights its connection to certain critical signaling pathways such as the epithelial-to-mesenchymal transition (EMT) and cell differentiation pathways. The interaction of CK-3 with proteins like Cytokeratin 12 regulates these pathways and contributes to maintaining corneal epithelial homeostasis and integrity. Such interactions enable CK-3 to help maintain the proper functioning and regeneration of epithelial barriers.
Associated diseases and disorders	CK-3's alteration or dysfunction may contribute to corneal-related diseases such as keratitis and corneal dystrophies. Abnormalities or mutations in CK-3 affect corneal integrity leading to compromised vision and disease symptoms. In these disorders its interaction with proteins like AE5 which participates in corneal structural pathways can be disrupted leading to pathophysiological conditions affecting the corneal epithelium. Understanding CK-3's role in these diseases may help guide 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

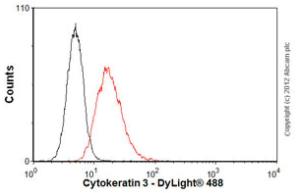
We do not recommend this combination. It is not covered by our product promise.

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.

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Terms & Conditions.

1 product image



Flow Cytometry (Intracellular) - Anti-Cytokeratin 3/CK-3 antibody [AE5] (ab77869)

Cytokeratin 3/CK-3 Flow Cytometry (Intracellular) staining using mouse Anti-Cytokeratin 3/CK-3 antibody

Overlay histogram showing A431 cells stained with ab77869 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab77869, 2µg/1x10^6 cells) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H+L) (ab96879) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG1 [ICIGG1] (ab91353, 2µg/1x10^6 cells) used under the same conditions. Acquisition of >5,000 events was performed.

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