abcam

ab288379

Anti-Cdc37 antibody [10C3]

Recombinant

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.4 Preservative: 0.02% Sodium azide Constituents: PBS, 50% Glycerol (glycerin, glycerine), 0.87% Sodium chloride
Form	Liquid
Clonality	Monoclonal
Immunogen	Synthetic Peptide within Human CDC37. The exact immunogen used to generate this antibody is proprietary information. Database link Q16543
Clone number	10C3
Purification technique	Affinity purification

Reactivity data

Flow Cyt

Tested

Species	Human
Dilution info	1/50
Notes	-

WB

Tested

Species	Human
Dilution info	1/2000
Notes	-

Target data

See full target information CDC37

Function	Co-chaperone that binds to numerous kinases and promotes their interaction with the Hsp90 complex, resulting in stabilization and promotion of their activity (PubMed:8666233). Inhibits HSP90AA1 ATPase activity (PubMed:23569206).

Storage

Shipped at conditions	Blue Ice
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

Supplementary info

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

Activity summary	The Cdc37 protein also known as cell division cycle 37 homolog is a molecular chaperone that assists in the proper folding and stabilization of protein kinases. With a mass of approximately 44 kDa Cdc37 is widely expressed in mammalian tissues. It interacts directly with other proteins aiding in their stabilization and activity. Functioning closely with Hsp90 Cdc37 forms a chaperone complex critical for the maturation of several protein kinases.
Biological function summary	Cdc37 serves as a co-chaperone with Hsp90 in regulating protein kinase activity by maintaining their functional conformation and stability. This protein acts mainly as a kinase-specific adapter that recruits kinases to the Hsp90 chaperone system forming a protein complex essential for the proper functioning of key signaling

	molecules. Its role is vital in signal transduction and cellular growth regulation ensuring proper cell cycle progression and response to external stimuli.
Pathways	Cdc37 plays a significant role in the PI3K/AKT and MAPK signaling pathways. In these pathways Cdc37 assists in the proper activation and function of various kinases such as AKT and RAF which are important for cell growth survival and proliferation. Its partnership with Hsp90 in these pathways underlines its importance in maintaining kinase activity ensuring that signaling cascades proceed correctly for normal cellular function.
Associated diseases and disorders	Cdc37 has been implicated in cancer and neurodegenerative diseases like Alzheimer's. Overexpression or dysfunction of Cdc37 can lead to improper activation of oncogenic kinases contributing to tumor progression. Additionally the protein's association with Hsp90 highlights its potential involvement in Alzheimer's where protein misfolding and stability are disrupted making Cdc37 a target of interest for therapeutic intervention in these conditions.

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

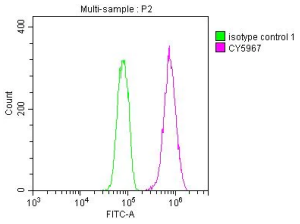
We do not recommend this combination. It is not covered by our product promise.

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1 product image



Flow Cytometry - Anti-Cdc37 antibody [10C3] (ab288379)

Cdc37 Flow Cytometry staining using rabbit Anti-Cdc37 antibody

Overlay histogram showing HeLa cells stained with ab288379 (red line) at 1:50. The cells were fixed with 70% Ethylalcohol (18h) and then incubated in 10% normal goat serum to block non-specific protein-protein interactions followedby the antibody (1µg/1 x 10^6cells) for 1 h at 4°C.The secondary antibody used was FITC-conjugated goat anti-rabbit IgG (H+L) at 1/200 dilution for 30 min at 4°C. Control antibody (green line) was Rabbit IgG (1µg/1 x 10^6cells) used under the same conditions. Acquisition of >10,000 events was performed.

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