abcam

ab73331

Anti-DeltaD antibody [Dld 5C7/2, zdd2]

Key facts

Isotype	IgG1
Host species	Mouse
Storage buffer	Preservative: 0.02% Sodium azide Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	Native Full Length Protein corresponding to Zebrafish dld. Database link Q8UWJ4
Clone number	Dld 5C7/2, zdd2
Purification technique	Affinity purification Protein A
Specificity	This antibody recognises the extracellular domain of zebrafish DeltaD. This antibody does not detect DeltaC; but it cross-reacts weakly with DeltaA.
Epitope	Zebrafish DeltaD protein extracellular domain.
Concentration	1 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

Flow Cyt

Expected

Species	Zebrafish
Dilution info	-

Notes	ab170190 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.

ELISA

Expected

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

WB

Expected

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

ICC/IF

Expected

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

IHC - Wmt

Expected

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

IHC-Fr

Expected

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

Target data

See full target information dld

Function	Acts as a ligand for Notch receptors and is involved in primary neurogenesis and somitogenesis. Can activate Notch receptors, thereby playing a key role in lateral inhibition, a process that prevents the immediate neighbors of each nascent neural cell from simultaneously embarking on neural differentiation. Required in somite segmentation to keep the oscillations of neighboring presomitic mesoderm cells synchronized.

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	DeltaD also known as Notch ligand Delta-like 3 is a member of the Delta/Notch family. It has a molecular mass of approximately 60 kDa. Expression of DeltaD occurs mainly in human embryonic tissues though it is also present in some adult tissues including brain and muscle. The Notch signaling pathway where DeltaD functions as a ligand is essential for communication between adjacent cells via binding with Notch receptors.
Biological function summary	Proteins from the Delta/Notch family influence numerous developmental processes. DeltaD participates in the regulation of cell fate determination and differentiation during embryonic development. It works within the Notch signaling pathway where it forms a complex with Notch receptors and other ligands to

	control the transcription of target genes. The modulation of Notch signaling by DeltaD is important for proper tissue patterning and morphogenesis.
Pathways	Many cellular activities rely on DeltaD's interaction with the Notch signaling pathway. This pathway influences critical processes such as angiogenesis and neurogenesis. Within these framework DeltaD interacts with several Notch receptors such as Notch1 and Notch2 to regulate gene expression. The interplay between DeltaD and these receptors ensures the correct execution of developmental programs and cellular differentiation.
Associated diseases and disorders	Dysregulation of DeltaD expression associates with congenital conditions such as spondylocostal dysostosis and neural tube defects. Anomalies in the Notch signaling pathway where DeltaD acts can disrupt normal development resulting in such pathologies. Notch1 and other family members are involved in the pathophysiology of these disorders emphasizing DeltaD's role in maintaining proper developmental signaling and tissue function.

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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In the unlikely event of one of our products not working as expected, you are covered by our product promise.

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