abcam

ab73336

Anti-DeltaC antibody [zdc2]

Key facts

Isotype	IgG2a
Host species	Mouse
Storage buffer	Preservative: 0.02% Sodium azide Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	Native Full Length Protein corresponding to Zebrafish Delta-like protein C. Database link Q9IAT6
Clone number	zdc2
Purification technique	Affinity purification Protein A
Specificity	Delta proteins activate Notch through a binding reaction that depends on their extracellular domains. During somitogenesis, Notch signalling via DeltaC keeps the oscillations of neighbouring cells in synchrony. DeltaC is also expressed in subsets of cells in the nervous system and elsewhere.
Epitope	DeltaC 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	ab170191 - Mouse monoclonal IgG2a, 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 Delta-like protein C

Function	Acts as a ligand for Notch receptors and is involved in somitogenesis. Can activate Notch receptors. 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	The DeltaC protein sometimes referred to as dlC is a member of the Delta family part of the Notch signaling pathway. Its molecular mass is approximately 26 kDa. Expression of DeltaC occurs predominantly in the central nervous system and various embryonic tissues where it plays a role in cell fate determination. The protein functions through interactions with the Notch receptors transmitting signals essential for tissue development and differentiation.
Biological function summary	DeltaC mediates cell-to-cell communication that informs the differentiation of cells within tissues. It forms part of the ligand-receptor complex where DeltaC acts as a ligand binding to Notch receptors on adjacent cells. This interaction triggers a proteolytic cleavage of the Notch receptor activating the Notch signaling pathway. This process influences the transcription of target genes necessary for the developmental patterning in organisms.

Pathways	DeltaC acts as a critical factor in the Notch signaling pathway. This pathway regulates several processes like neurogenesis and somitogenesis. DeltaC interacts with proteins such as Jagged which is another ligand involved in Notch signaling. These interactions modulate cellular processes by influencing gene expression patterns essential for developmental milestones and homeostasis.
Associated diseases and disorders	Mutations or dysregulation of DeltaC have been implicated in certain cancers including neuroblastoma due to its role in cell differentiation and tissue patterning. Additionally alterations in DeltaC expression link to Alagille syndrome a genetic disorder affecting the liver and other organs. The DeltaC-related aberrations influence Notch receptor interactions especially co-involving Jagged proteins critical in these pathophysiological states.

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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