



# Mouse Anti-Human DLL1 monoclonal antibody, clone NN16 (CABT-ZB538)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

<b>Specificity</b>	It reacts with Human DLL1
<b>Target</b>	DLL1
<b>Immunogen</b>	Recombinant Human DLL1/Delta-like 1 Protein
<b>Isotype</b>	IgG
<b>Source/Host</b>	Mouse
<b>Species Reactivity</b>	Human
<b>Clone</b>	NN16
<b>Purification</b>	Protein A purified
<b>Conjugate</b>	Unconjugated
<b>Applications</b>	ELISA(cap) We recommend the following for sandwich ELISA (Capture - Detection): CABT-ZB538 - CABT-ZB901 This antibody will detect DLL1 in antibody pair set. [ABPR-ZB114]
<b>Preparation</b>	This antibody was produced from a hybridoma resulting from the fusion of a mouse myeloma with B cells obtained from a mouse immunized with purified, recombinant Human DLL1 / Delta-like 1. The IgG fraction of the cell culture supernatant was purified by Protein A affinity chromatography.
<b>Format</b>	Purified, Liquid
<b>Concentration</b>	Lot specific

<b>Size</b>	50 µL, 100 µL, 200 µL, 1 mL
<b>Buffer</b>	PBS
<b>Preservative</b>	None
<b>Storage</b>	This antibody can be stored at 2°C-8°C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20°C to -80°C. Preservative-Free. Avoid repeated freeze-thaw cycles.
<b>Ship</b>	Wet ice

## BACKGROUND

<b>Introduction</b>	Delta-like protein 1 (DLL1), also known as Delta1, a single-pass type I membrane protein which contains one DSL domain and eight EGF-like domains, acts as a ligand for Notch receptors, and positively regulates T-cell development. DLL1 is proteolytically processed in a similar manner to the Notch receptor, and it has been speculated to participate in bidirectional signaling. The proteolytic processing of DLL1 helps achieve an asymmetry in Notch signaling in initially equivalent myogenic cells and helps sustain the balance between differentiation and self-renewal. Interactions between DLL1 and Notch in trans activate the Notch pathway, whereas DLL1 binding to Notch in cis inhibits Notch signaling. DLL1 undergoes proteolytic processing in its extracellular domain by ADAM10. It had been demonstrated that DLL1 represents a substrate for several other members of the ADAM family. In co-transfected cells, DLL1 is constitutively cleaved by ADAM12, and the N-terminal fragment of DLL1 is released to medium. ADAM12-mediated cleavage of DLL1 is cell density-dependent, takes place in cis orientation, and does not require the presence of the cytoplasmic domain of ADAM12. Full-length DLL1, but not its N- or C-terminal proteolytic fragment, co-immunoprecipitates with ADAM12. By using a Notch reporter construct, we show that DLL1 processing by ADAM12 increases Notch signaling in a cell-autonomous manner. Furthermore, ADAM9 and ADAM17 have the ability to process DLL1. In contrast, ADAM15 does not cleave DLL1, although the two proteins still co-immunoprecipitate with each other. During fetal development, DLL1 is an essential Notch ligand in the vascular endothelium of large arteries to activate Notch1 and maintain arterial identity. DLL1-Notch signaling was required for VEGF receptor expression in fetal arteries.
---------------------	--

<b>Keywords</b>	DLL1; delta-like 1 (Drosophila); DL1; Delta
-----------------	---

## GENE INFORMATION

<b>Synonyms</b>	DLL1; delta-like 1 (Drosophila); DL1; Delta; DELTA1; delta-like protein 1; H-Delta-1; drosophila Delta homolog 1
-----------------	--

<b>Entrez Gene ID</b>	<a href="#">28514</a>
-----------------------	-----------------------

UniProt ID

[O00548](#)

---