



# Mouse Anti-Human DLL4 monoclonal antibody, clone NN17 (CABT-ZB818)

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

## PRODUCT INFORMATION

<b>Specificity</b>	It reacts with Human DLL4
<b>Target</b>	Dll4
<b>Immunogen</b>	Recombinant Human DLL4 protein
<b>Isotype</b>	IgG
<b>Source/Host</b>	Mouse
<b>Species Reactivity</b>	Human
<b>Clone</b>	NN17
<b>Purification</b>	Protein A purified
<b>Conjugate</b>	Unconjugated
<b>Applications</b>	ELISA, ELISA(cap) We recommend the following for sandwich ELISA (Capture - Detection): CABT-ZB818 - CABT-ZB1108 This antibody will detect DLL4 in antibody pair set. [ABPR-ZB399]
<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 DLL4 / Delta4 extracellular domain. 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

**Introduction**

Delta-like protein 4 (DLL4, Delta4), a type I membrane-bound Notch ligand, is one of five known Notch ligands in mammals and interacts predominantly with Notch 1, which has a key role in vascular development. Recent studies yield substantial insights into the role of DLL4 in angiogenesis. DLL4 is induced by vascular endothelial growth factor (VEGF) and acts downstream of VEGF as a 'brake' on VEGF-induced vessel growth, forming an autoregulatory negative feedback loop inactivating VEGF. DLL4 is downstream of VEGF signaling and its activation triggers a negative feedback that restrains the effects of VEGF. Attenuation of DLL4/Notch signaling results in chaotic vascular network with excessive branching and sprouting. DLL4 is widely distributed in tissues other than vessels including many malignancies. Furthermore, the molecule is internalized on binding its receptor and often transported to the nucleus. In pathological conditions, such as cancer, DLL4 is up-regulated strongly in the tumour vasculature. Blockade of DLL4-mediated Notch signaling strikingly increases nonproductive angiogenesis, but significantly inhibits tumor growth in preclinical mouse models. In preclinical studies, blocking of DLL4/Notch signaling is associated with a paradoxical increase in tumor vessel density, yet causes marked growth inhibition due to functionally defective vasculature. Thus, DLL4 blockade holds promise as an additional strategy for angiogenesis-based cancer therapy.

**Keywords** DLL4; delta-like 4 (Drosophila); hdelta2; delta-like protein 4

## GENE INFORMATION

**Synonyms** DLL4; delta-like 4 (Drosophila); hdelta2; delta-like protein 4; delta4; delta 4; delta ligand 4; notch ligand DLL4; delta-like 4 homolog; delta-like 4 protein; notch ligand delta-2; drosophila Delta homolog 4

**Entrez Gene ID** [54567](#)

**UniProt ID** [Q9NR61](#)