



Rabbit Anti-Human DLL4 monoclonal antibody, clone S114 (CABT-ZB1108)

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

PRODUCT INFORMATION

Specificity	It reacts with Human DLL4
Target	DLL4
Immunogen	Recombinant Human DLL4 protein
Isotype	IgG
Source/Host	Rabbit
Species Reactivity	Human
Clone	S114
Purification	Protein A purified
Conjugate	Unconjugated
Applications	ELISA, ELISA(det) We recommend the following for sandwich ELISA (Capture - Detection): CABT-ZB818 - CABT-ZB1108 This antibody will detect DLL4 in antibody pair set. [ABPR-ZB399]
Preparation	This antibody was obtained from a rabbit immunized with purified, recombinant Human DLL4 / Delta4 extracellular domain.
Format	Purified, Liquid
Concentration	Lot specific
Size	50 µL, 100 µL, 1 mL

Buffer	PBS
Preservative	None
Storage	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.
Ship	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.
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Keywords	DLL4; delta-like 4 (Drosophila); hdelta2; delta-like protein 4
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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