

#2589 Store at -20°C

DLL4 Antibody


Cell Signaling
TECHNOLOGY®

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For Research Use Only. Not for Use in Diagnostic Procedures.

Applications: WB, IP	Reactivity: H	Sensitivity: Endogenous	MW (kDa): 75-80	Source: Rabbit	UniProt ID: #Q9NR61	Entrez-Gene Id: 54567
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Product Usage Information

Application

Western Blotting
Immunoprecipitation

Dilution

1:1000
1:50

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at –20°C. Do not aliquot the antibody.

Specificity / Sensitivity

DLL4 Antibody detects endogenous levels of total DLL4 protein.

Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to a region surrounding residue Leu617 of human DLL4. Antibodies are purified by protein A and peptide affinity chromatography.

Background

Notch signaling is activated upon engagement of the Notch receptor with its ligands, the DSL (Delta, Serrate, Lag2) proteins of single-pass type I membrane proteins. The DSL proteins contain multiple EGF-like repeats and a DSL domain that is required for binding to Notch (1,2). Five DSL proteins have been identified in mammals: Jagged1, Jagged2, Delta-like (DLL) 1, 3 and 4 (3). Ligand binding to the Notch receptor results in two sequential proteolytic cleavages of the receptor by the ADAM protease and the γ-secretase complex. The intracellular domain of Notch is released and then translocates to the nucleus where it activates transcription. Notch ligands may also be processed in a way similar to Notch, suggesting a bi-directional signaling through receptor-ligand interactions (4-6). DLL4 expression is highly restricted to the vascular endothelium (7), and haploinsufficiency of DLL4 results in major defects in vascular systems in mouse (8-11). Blockade of DLL4 inhibits tumor growth in model systems (12-14).

Background References

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12. Noguera-Troise, I. et al. (2006) *Nature* 444, 1032-1037.
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Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

WB: Western Blotting **IP:** Immunoprecipitation

Cross-Reactivity Key

H: human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **Mi:** mink **C:** chicken **Dm:** D. melanogaster
X: Xenopus **Z:** zebrafish **B:** bovine **Dg:** dog **Pg:** pig **Sc:** S. cerevisiae **Ce:** C. elegans **Hr:** horse
GP: Guinea Pig **Rab:** rabbit **All:** all species expected

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