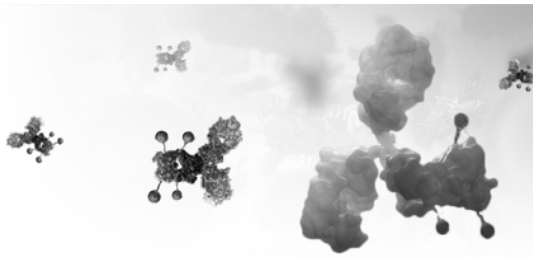

Anti-DLL1 monoclonal antibody, clone HMD1-5 (CABT-49802HM)

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

PRODUCT INFORMATION

Product Overview	Hamster anti Mouse Delta-Like Protein 1 antibody, clone HMD1-5 specifically recognizes Delta-like protein 1 (DLL1), one of the five major ligands of the Notch signaling pathway, which is activated through the binding of specific ligands to the Notch receptors Notch 1-4. The Notch signaling pathway is an evolutionarily conserved pathway in multi-cellular organisms, which is vital for cell-cell communication, important during fundamental developmental and physiological processes, including regulation of cell fate decisions during neuronal, cardiac and endocrine development, stem cell hematopoiesis, thymic T-cell development, and both tumor progression and suppression. Ligation of Notch receptors by their specific ligands, Jagged1 (CD339), Jagged2, Delta-like protein 1 (DLL1), DLL3 and DLL4, on physically adjacent signal receiving cells, induces proteolysis of the receptors by ADAM-family metalloproteases and the gamma-secretase complex, within the transmembrane domain, releasing the Notch intracellular domain (NICD) to translocate to the nucleus. Subsequent signal transduction then occurs through either the CSL-NICD-Mastermind complex cascade (canonical pathway), or NF-kappaB-NICD and CSL-NICD-Deltex complex signaling cascades (non-canonical pathway). The canonical pathway inhibits the differentiation of stem cells or progenitor cells, whilst the non-canonical pathway promotes differentiation. DLL1 is widely expressed, and acts as a mediator of cell fate decisions during hematopoiesis, and may play a role in cell-to-cell communication in mammalian embryos. DLL1 plays an important role in B and T cell differentiation, in embryonic somite formation and patterning, and associates with the scaffolding protein MAGI1 at adherens junctions on neuronal processes. Signaling through DLL1 and Notch 2 has been implicated in the development of marginal zone B cells (MZB). Hamster anti Mouse Delta-Like Protein 1 antibody, clone HMD1- Flow Cytometry Use 10ul of the suggested working dilution to label 1x106 cells in 100ul.
Specificity	DLL1
Immunogen	DLL1-expressing CHO cells.
Isotype	IgG

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Source/Host	Hamster
Species Reactivity	Mouse, Human, Rat
Clone	HMD1-5
Conjugate	Unconjugated
Applications	IHC-Fr; FC; FA
Format	Purified IgG - liquid
Size	250 µg
Preservative	See individual product datasheet
Storage	in frost-free freezers is not recommended. This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

GENE INFORMATION

Gene Name	Dll1 delta-like 1 (Drosophila) [Mus musculus (house mouse)]
Official Symbol	DLL1
Synonyms	DLL1; delta-like 1 (Drosophila); Delta1; delta-like protein 1; delta like-1; drosophila Delta homolog 1;
Entrez Gene ID	13388
Protein Refseq	NP_031891
UniProt ID	O00548
Chromosome Location	17 A2; 17 8.95 cM
Pathway	Activated NOTCH1 Transmits Signal to the Nucleus; Constitutive Signaling by NOTCH1 HD Domain Mutants; Constitutive Signaling by NOTCH1 HD+PEST Domain Mutants; Constitutive Signaling by NOTCH1 PEST Domain Mutants; Constitutive Signaling by NOTCH1 t(7;9)(NOTCH1:M1580_K2555) Translocation Mutant; Delta-Notch Signaling Pathway; Disease; FBXW7 Mutants and NOTCH1 in Cancer;
Function	Notch binding; calcium ion binding; protein binding;

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