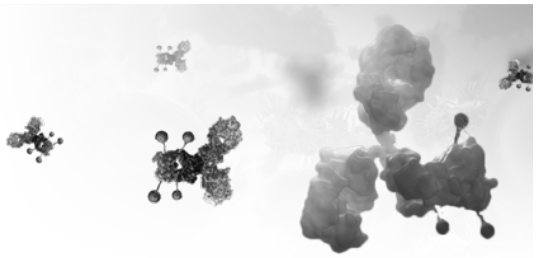

Anti-JAG2 monoclonal antibody, clone HMJ2-1 (CABT-49812HM)

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

PRODUCT INFORMATION

Product Overview	Hamster anti Mouse JAGGED2 antibody, clone HMJ2-1 specifically recognizes Jagged2, 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. Jagged2 is expressed by stromal and thymic lymphoid cells, and by splenic macrophages and dendritic cells (DCs), and plays a vital role during limb, craniofacial, tooth, and thymic development, as well as being implicated in the maintenance and function of neuronal cells in both the central (CNS) and enteric (gastrointestinal) nervous system. Studies have shown that the anti-tumor cytolytic activity of natural killer (NK) cells can be enhanced by Jagged2 stimulation, and that the vital role which DC Jagged2 expression plays in DC-mediated NK cell activation, may Flow Cytometry Use 10ul of the suggested working dilution to label 1x106 cells in 100ul.
Specificity	JAG2
Immunogen	Jagged2-expressing CHO cells.
Isotype	IgG

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Source/Host	Hamster
Species Reactivity	Mouse, Human, Rat
Clone	HMJ2-1
Conjugate	Unconjugated
Applications	IHC-Fr; FC
Format	Purified IgG - liquid
Size	100 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	Jag2 jagged 2 [Mus musculus (house mouse)]
Official Symbol	JAG2
Synonyms	JAG2; jagged 2; sm; Serh; D12Ggc2e; mJagged2-1; protein jagged-2; syndactylism;
Entrez Gene ID	16450
Protein Refseq	NP_034718
UniProt ID	Q9Y219
Chromosome Location	12 F1; 12 61.37 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:M158_K2555) Translocation Mutant; Delta-Notch Signaling Pathway; Disease; FBXW7 Mutants and NOTCH1 in Cancer.
Function	Notch binding; calcium ion binding; growth factor activity; protein binding;

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