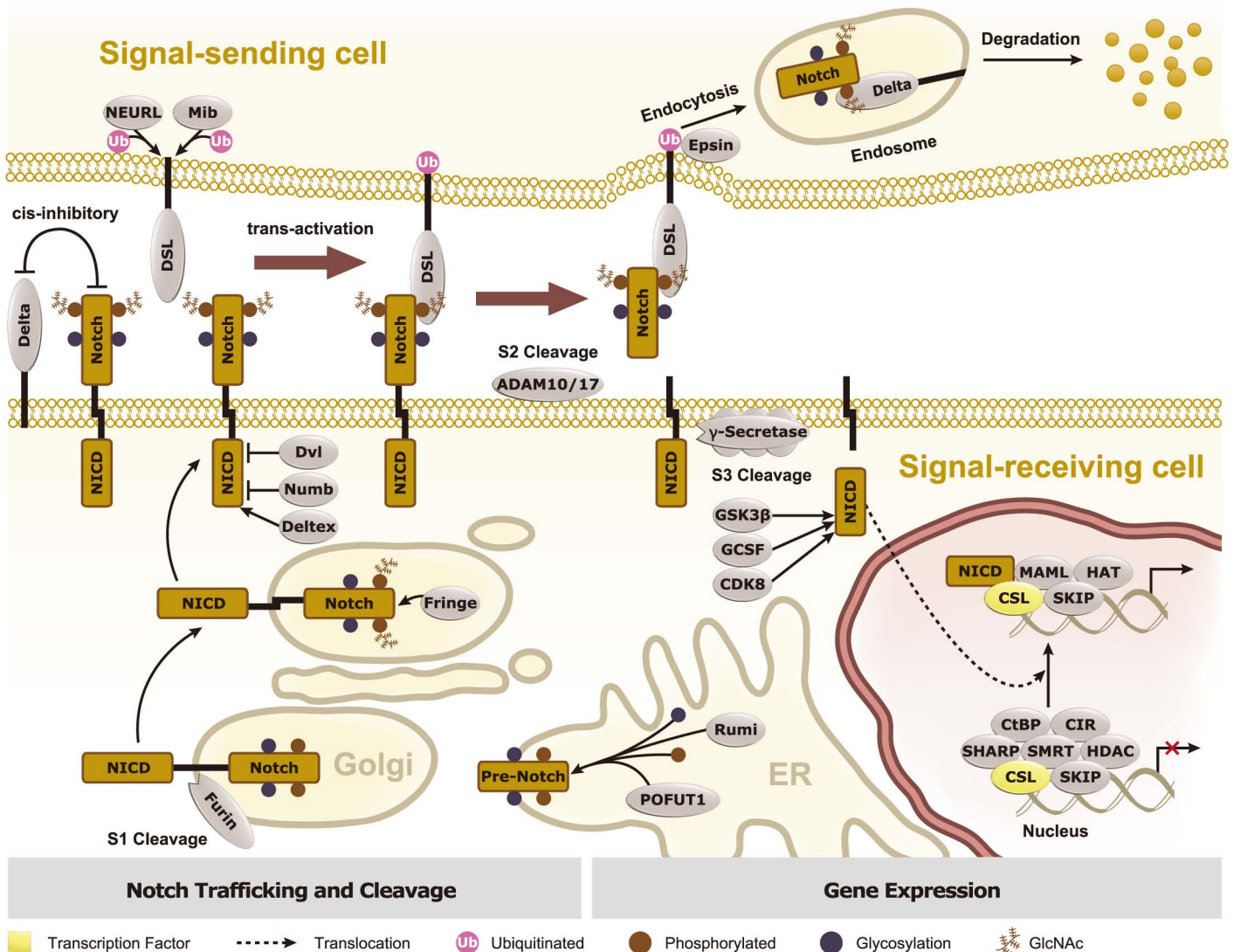




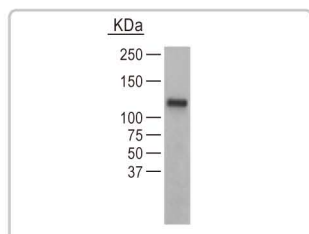
Notch Pathway



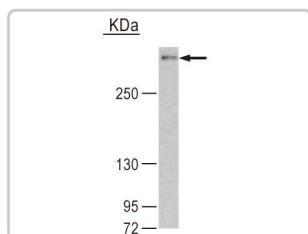
The Notch signaling pathway plays a vital role in the regulation of asymmetric cell division, cell fate specification and proliferation. Mammals possess 4 different Notch receptors, referred to as Notch1, 2, 3, and 4. The Notch receptor is a hetero-oligomer transmembrane protein that comprises a large extracellular domain, a single-pass transmembrane span, and a small intracellular region. The ligands for Notch receptors, DSL (Delta (referred to Delta-like family in mammals), Serrate (referred to as Jagged family in mammals) and Lag-2), are also transmembrane proteins, indicating the signaling is triggered upon physical contact between two individual cells. This direct cell-to-cell contact is a key characteristic to the Notch pathway, in which lateral inhibition is elicited from a signal-sending cell to its neighbor signal-receiving cells.

Proper maturation of the Notch receptor requires specific glycosylation by POFUT1 and Fringe (referred to MFNG, LFNG, and RFNG in mammals), along with proteolytic cleavage by FURIN at the prospective extracellular region of the pre-Notch protein during its intracellular trafficking through Golgi complex. This results in a bipartite-protein receptor that ultimately anchors on cell surface. Binding of ligand to the Notch receptor initiates two independent proteolytic cleavages. First, the metalloprotease ADAM family cleaves the Notch extracellular domain. This domain remains bound to the ligand and is endocytosed by the signal-sending cell. Next, the γ -secretase complex (PSEN1/2, APH1, PEN2 and NCSTN) cleaves Notch at its intracellular site and releases the Notch intracellular domain (NICD) within the signal-receiving cell. NICD then translocates into the nucleus, where it regulates gene expression by activating the transcription factor CSL.

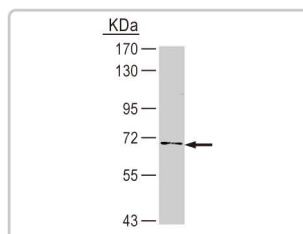
Cat. No.	Product Name	Host & Clonality	Reactivity	Application
GTX21997	ADAM10 antibody	Rb pAb	Hu, Ms, Rat	WB
GTX89760	ADAM17 / TACE antibody	Gt pAb	Hu, Ms, Rat	ELISA, WB
GTX85061	APH1 antibody	Rb pAb	Hu, Ms, Rat	ELISA, IHC, WB
GTX112358	CSL antibody	Rb pAb	Hu	ICC/IF, WB
GTX111246	CtBP1 antibody	Rb pAb	Hu, Ms	ICC/IF, WB
GTX114346	CtBP2 antibody	Rb pAb	Hu	IHC-P, WB
GTX112367	Deltex-1 antibody	Rb pAb	Hu	ICC/IF, IHC-P, WB
GTX88299	Deltex-2 antibody	Gt pAb	Hu, Cow, Rat	ELISA
GTX88228	Deltex-3 antibody	Gt pAb	Hu, Ms, Cow, Rat	ELISA, WB
GTX88445	DLL1 antibody	Gt pAb	Hu, Ms, Rat	ELISA, WB
GTX109649	DLL4 antibody	Rb pAb	Hu	WB, ELISA-Ag
GTX59742	Furin / PACE antibody	Rb pAb	Hu, Ms, Cow, Rat, Shp	WB
GTX48691	Jagged-1 antibody	Rb pAb	Hu, Ms	ELISA, ICC/IF, IHC, WB
GTX62680	Jagged-2 antibody [EPR3646]	Rb mAb	Hu, Ms, Rat	ICC/IF, WB
GTX46596	LFNG antibody (N-term)	Rb pAb	Hu, Ms, Rat	WB
GTX46214	MFNG antibody (Middle)	Rb pAb	Hu, Ms, Rat	WB
GTX104748	MAML1 antibody	Rb pAb	Hu	ICC/IF, WB, ELISA-Ag
GTX17019	MAML1 antibody	Gt pAb	Hu, Ms	ELISA, WB
GTX87864	NEURL1 antibody	Rb pAb	Hu	ELISA, WB
GTX87459	NEURL2 antibody	Rb pAb	Hu, Ms, Rat	ELISA, IHC, WB
GTX61916	Nicastrin antibody [EPR2575Y]	Rb mAb	Hu, Ms, Rat	FACS, IP, WB
GTX62674	Nicastrin antibody [EPR2574]	Rb mAb	Hu, Ms	ICC/IF, WB
GTX61533	Notch1 antibody [EP1238Y]	Rb mAb	Hu, Ms	ICC/IF, IHC, WB
GTX23294	Notch1 antibody [A6]	Ms mAb	Hu, Ms	FACS, IHC-P
GTX86924	Notch1 (cleaved Val744) antibody	Rb pAb	Hu, Ms, Rat	ELISA, IHC, WB
GTX101593	Notch2 antibody	Rb pAb	Hu, Ms	WB
GTX86911	Notch2 (cleaved Val697) antibody	Rb pAb	Hu, Ms, Rat	ELISA, WB
GTX86955	Notch2 (cleaved Asp733) antibody	Rb pAb	Hu, Ms, Rat	ELISA, IHC, WB
GTX86904	Notch2 (cleaved Ala734) antibody	Rb pAb	Hu, Ms, Rat	ELISA, WB
GTX104681	Notch 3 antibody	Rb pAb	Hu	WB, ELISA-Ag
GTX86910	Notch4 (cleaved Val432) antibody	Rb pAb	Hu	ELISA, WB
GTX111715	Numb antibody	Rb pAb	Hu	WB
GTX83974	Numb antibody [1A7]	Ms mAb	Hu	FACS, ICC/IF, WB
GTX119122	POFUT1 antibody	Rb pAb	Hu, Ms	WB
GTX116016	Presenilin 1 antibody	Rb pAb	Hu	ICC/IF, IHC-P, WB
GTX61684	Presenilin 1 antibody [EP2000Y]	Rb mAb	Hu, Ms, Rat	FACS, ICC/IF, IHC, IP, WB
GTX61582	Presenilin 2 antibody [EP1515Y]	Rb mAb	Hu, Ms, Rat	ICC/IF, IHC, IP, WB
GTX27301	Presenilin 2 antibody	Gt pAb	Hu	ELISA, IHC-P
GTX109978	SKIP antibody	Rb pAb	Hu, Ms	ICC/IF, IHC-P, WB
GTX70246	SMRT antibody [1212]	Ms mAb	Hu	ChIP, IHC-Fr, IP, WB
GTX70248	SMRT antibody [1542]	Ms mAb	Hu	IP, WB
GTX111230	GSK3 beta antibody	Rb pAb	Hu, Ms	ICC/IF, IHC-P, WB



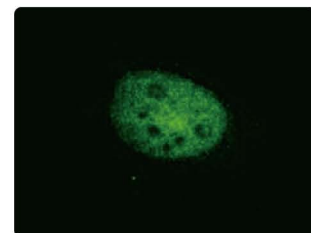
Notch1 antibody (GTX61533):
WB analysis on Hek293 whole cell lysate.



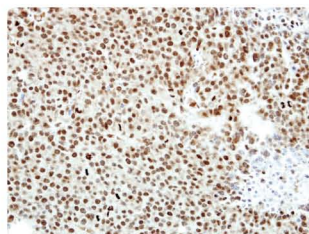
Notch2 antibody (GTX101593):
WB analysis on HeLa whole cell lysate.



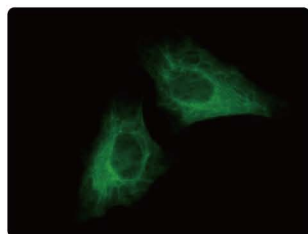
Numb antibody (GTX111715):
WB analysis on A431 whole cell lysate.



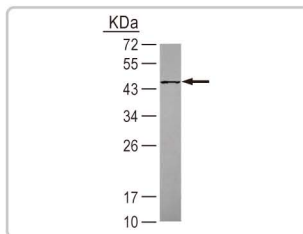
CSL antibody (GTX112358):
ICC/IF analysis on paraformaldehyde-fixed HeLa cells.



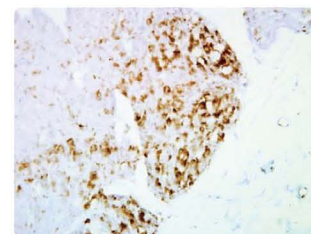
CtBP2 antibody (GTX114346):
IHC analysis on paraffin-embedded Huh7 xenograft.



Presenilin 1 antibody (GTX116016):
ICC/IF analysis on methanol-fixed HeLa cells.



O-Fut antibody (GTX119122):
WB analysis on HCT116 whole cell lysate.



GSK3 beta antibody (GTX111230):
IHC analysis on paraffin-embedded human ulcerative colitis tissue.