

Notch Receptor Interaction Antibody Sampler Kit

Cat# AK0209

Upon receipt, store at -20°C. Avoid freeze/thaw cycles.

PRODUCT DESCRIPTION

Notch signaling is activated upon engagement of the Notch receptor with its ligands, the Delta, Serrate, Lag2 (DSL) single-pass type I membrane proteins. DSL proteins contain multiple EGF-like repeats and a DSL domain that is required for binding to Notch. Five DSL proteins have been identified in mammals: Jagged1, Jagged2, Delta-like (DLL) 1, 3, and 4. 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 similar manner, suggesting bi-directional signaling through receptor-ligand interactions. TNF- α converting enzyme (TACE), also known as ADAM17, is a transmembrane metalloprotease that plays a key role in the cleavage of a number cell surface molecules in a process known as "shedding". TACE is abundantly expressed in many adult tissues, but in fetal development, expression is differentially regulated. TACE activates Notch in a ligand-independent manner and has been shown to play a role in the development of the Drosophila nervous system. Recombining Binding Protein, SUPpressor of Hairless (RBPSUH), also termed RBP-J or CSL, is the DNA-binding component of the transcription complex regulated by canonical Notch signaling. In the absence of Notch activation, RBPSUH suppresses target gene expression through interactions with a co-repressor complex containing histone deacetylase. Upon activation of Notch receptors, the Notch intracellular domain (NICD) translocates to the nucleus and binds to RBPSUH. This displaces the co-repressor complex and replaces it with a transcription activation complex that includes Mastermind-like (MAML) proteins and histone acetylase p300, leading to transcriptional activation of Notch target genes. Numb contains an amino-terminal phosphotyrosine-binding (PTB) domain and carboxy-terminal endocytic binding motifs for α -adapatin and EH (Eps1

PRODUCT INCLUDES

Cat No.	Product name	Quantity	Applications	Reactivity	Host
A340403	JAG1 Polyclonal Antibody	20 μ L	WB, ELISA	Human, Mouse, Rat	Rabbit
A340718	NUMB Polyclonal Antibody	20 μ L	WB, ELISA	Human, Mouse, Rat	Rabbit
A1013s	Goat Anti-Rabbit IgG (H+L) (peroxidase/HRP conjugated)	120 μ L	WB, ELISA	Rabbit	Goat

PRODUCT USE LIMITATION

These products are intended for research use only.