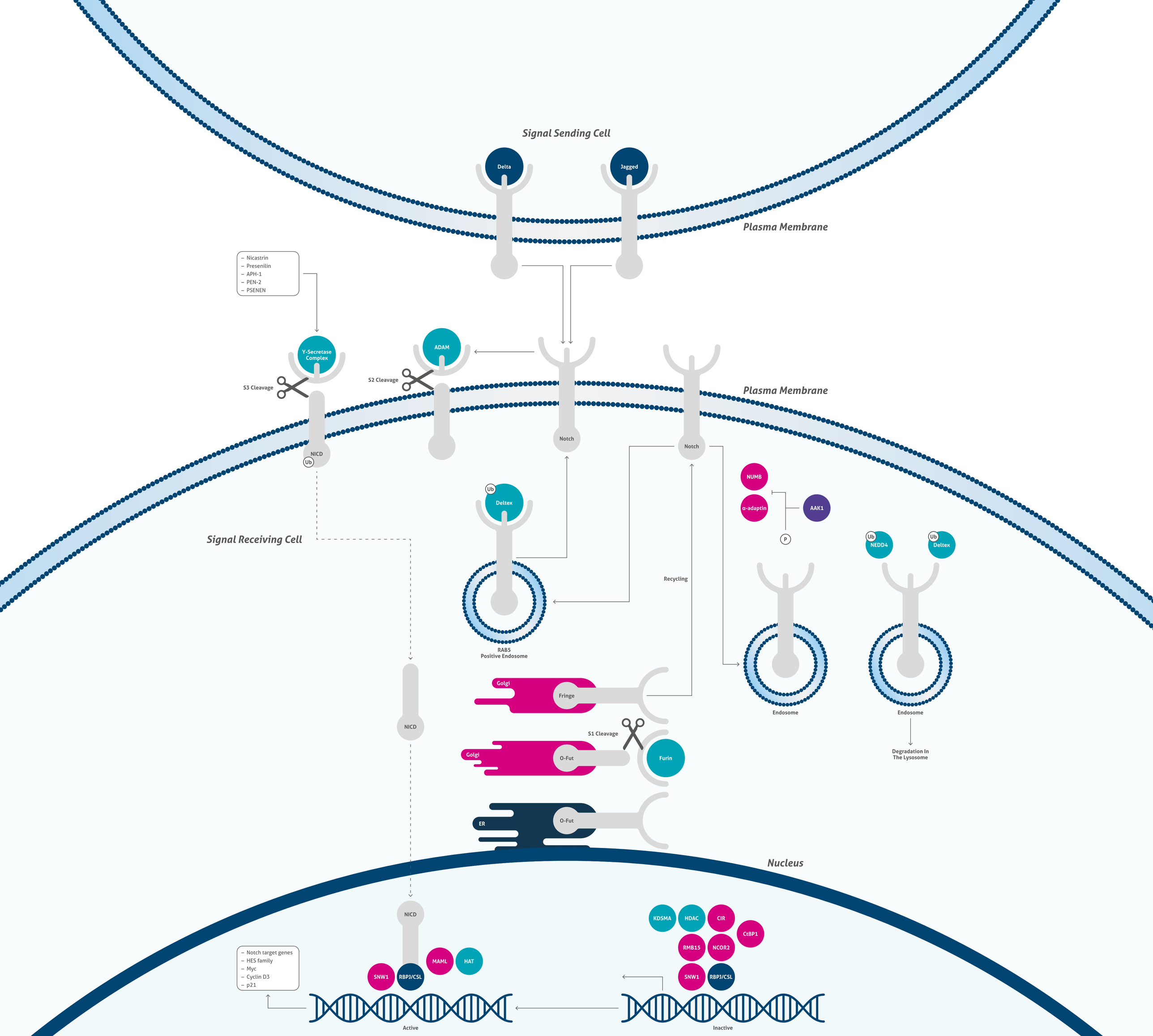

NOTCH SIGNALING PATHWAY

Though the Notch pathway is most famous for its role in development, it plays key roles in differentiation and tissue homeostasis in adults. Nowhere is this more manifest than leukemia where both constitutive activation and inactivation of this pathway lead to disease. Activating Notch receptor mutations are frequently observed in T-cell acute lymphoblastic leukemia and inactivating mutations are observed in chronic myelomonocytic leukemia. Conversely, mutations that lead to reduced activity of this protein are also associated with cancer, causing another hematopoietic cancer – chronic myelomonocytic leukemia.

Notch signaling is initiated when one cell expressing the appropriate ligand – the signal sending cell – interacts with another cell via its Notch receptor. This ligand-receptor binding triggers a series of proteolytic cleavages. One such step requires the γ-secretase enzyme complex, comprised of nicastrin, presenilin, APH1, PEN-2 and PSENEN; cleavage by the γ-secretase complex generates aportion of the Notch receptor – called the Notch intracellular domain (NICD) – freeing it from the cell membrane and enabling its relocation to the nucleus. Here it modulates the expression of many genes involved in growth and development through interaction with DNA-bound protein factors.

Legend	
———	Association
⟶	Directly Activates
- - - - - - ⟶	Indirectly Activates
——⊣	Inhibits
Ub	Ubiquitin
P	Phosphorylates

For more information or other pathways visit **ptglab.com**

RELATED PRODUCTS

Antibody Name	Catalog Number	Type	Applications
ADAM17	20259-1-AP	Rabbit Poly	ELISA, IHC, WB
AKT1	54 10176-2-AP	Rabbit Poly	ELISA, FC, IF, IHC, IP, WB
AP2A1	2 11401-1-AP	Rabbit Poly	ELISA, IF, IHC, IP, WB
APH1A	11643-1-AP	Rabbit Poly	ELISA, WB
APP	10524-1-AP	Rabbit Poly	ELISA, WB
BHLHE40	17895-1-AP	Rabbit Poly	ELISA, IP, WB
BHLHE41	1 12688-1-AP	Rabbit Poly	ELISA, IHC, IP, WB
BLOC1S1	19687-1-AP	Rabbit Poly	ELISA, IHC, IP, WB
CTBP1	10972-1-AP	Rabbit Poly	ELISA, IF, IHC, IP, WB
DLK2	15680-1-AP	Rabbit Poly	ELISA, WB
DLL1	20230-1-AP	Rabbit Poly	ELISA, WB
DTX2	18565-1-AP	Rabbit Poly	ELISA, IHC
EGFL7	1 19291-1-AP	Rabbit Poly	ELISA, IHC, WB
HAT1	2 11432-1-AP	Rabbit Poly	ELISA, IF, IHC, IP, WB
HDAC1	11 10197-1-AP	Rabbit Poly	ELISA, FC, IF, IHC, IP, WB
HDAC2	6 12922-3-AP	Rabbit Poly	ELISA, FC, IF, IHC, IP, WB
KAT2B	1 13983-1-AP	Rabbit Poly	ELISA, IHC, IP
KDM5A	18825-1-AP	Rabbit Poly	ELISA, IF, WB
MEF2C	15 10056-1-AP	Rabbit Poly	ELISA, IF, IHC, IP, WB

Antibody Name	Catalog Number	Type	Applications
MIB2	13696-1-AP	Rabbit Poly	ELISA, IP, WB
NCOR1	20018-1-AP	Rabbit Poly	ELISA, IHC, WB
NCSTN	14071-1-AP	Rabbit Poly	ELISA, IF, WB
NEDD4	1 21698-1-AP	Rabbit Poly	ELISA, IHC, IP, WB
NEURL	18898-1-AP	Rabbit Poly	ELISA, IP, WB
NEURL2	21263-1-AP	Rabbit Poly	ELISA, IHC, WB
NOTCH1	5 10062-1-AP	Rabbit Poly	ELISA, IP, WB
NOTCH 3	4 55114-1-AP	Rabbit Poly	ELISA, IHC, IP, WB
NUMB	11876-1-AP	Rabbit Poly	ELISA, WB
NUMB	60137-1-AP	Mouse Mono	ELISA, IF, IHC, WB
PSEN1	1 16163-1-AP	Rabbit Poly	ELISA, IP, WB
PSEN2	16168-1-AP	Rabbit Poly	ELISA, IHC
RBPJ/CSL	1 14613-1-AP	Rabbit Poly	ELISA, IHC, IP, WB
RMB15	9 10587-1-AP	Rabbit Poly	ELISA, IF, IHC, IP, WB

00 This number shows the amount of times our antibody has been cited in a publication.

CONTACT DETAILS

www.ptglab.com

PROTEINTECH GROUP
US Head Office

A: Proteintech Group, Inc.
5400 Pearl Street,
Rosemont, IL, 60018,
USA

T: 1 (888) 4PTGLAB,
(1-888-478-4522)
(toll free in USA),
or 1(312) 455-8498
(outside USA)

F: 1 (312) 455-8408

E: proteintech@ptglab.com

PROTEINTECH EUROPE
United Kingdom

A: Proteintech Europe, Inc.
4th Floor
196 Deansgate
Manchester
M3 3WF

T: +44 (161) 839-3007

F: +44 (161) 241-3103

E: europe@ptglab.com

PROTEINTECH
China Office

A: Wuhan Sanying Biotechnologies,
D3-3, No.666 Gaoxin Avenue,
Wuhan East Lake Hi-tech
Development Zone
Wuhan, Hubei, P.R.C

T: 027-87531629
or 4006-900-926

F: 027-87531627

E: service@ptglab.com

proteintech™
Antibodies | ELISA kits | Proteins