

Product datasheet for **TA500078**

NOTCH1 Mouse Monoclonal Antibody [Clone ID: OTI3E12]

Product data:

Product Type:	Primary Antibodies
Clone Name:	OTI3E12
Applications:	IF, IHC, WB
Recommended Dilution:	WB: 1:1000; IHC 1;50; RPPA 1:75; IF: 1:100
Reactivity:	Human, Mouse, Rat
Host:	Mouse
Isotype:	IgG2b
Clonality:	Monoclonal
Immunogen:	Recombinant protein expressed in E.coli corresponding to amino acids 2300-2556 of human NOTCH1
Formulation:	PBS (pH 7.3) containing 1% BSA, 50% glycerol and 0.02% sodium azide.
Concentration:	0.2 mg/ml
Purification:	Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G)
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	270.6 kDa
Gene Name:	notch receptor 1
Database Link:	NP_060087 Entrez Gene 18128 Mouse Entrez Gene 25496 Rat Entrez Gene 4851 Human P46531



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Background:

Notch1 is a member of the Notch family. Members of this Type 1 transmembrane protein family share structural characteristics including an extracellular domain consisting of multiple epidermal growth factor-like (EGF) repeats, and an intracellular domain consisting of multiple, different domain types. Notch family members play a role in a variety of developmental processes by controlling cell fate decisions. The Notch signaling network is an evolutionarily conserved intercellular signaling pathway which regulates interactions between physically adjacent cells. In *Drosophila*, notch interaction with its cell-bound ligands (delta, serrate) establishes an intercellular signaling pathway that plays a key role in development. Homologues of the notch-ligands have also been identified in human, but precise interactions between these ligands and the human notch homologues remain to be determined. This protein is cleaved in the trans-Golgi network, and presented on the cell surface as a heterodimer. This protein functions as a receptor for membrane bound ligands, and may play multiple roles during development

Synonyms:

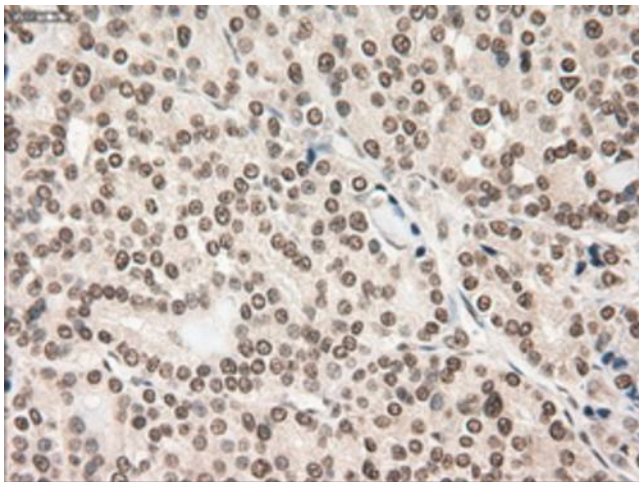
AOS5; AOVD1; hN1; TAN1

Protein Families:

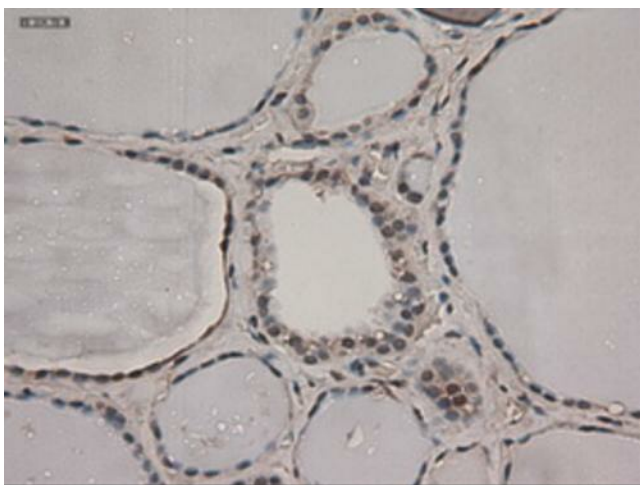
Adult stem cells, Cancer stem cells, Druggable Genome, ES Cell Differentiation/IPS, Stem cell relevant signaling - DSL/Notch pathway

Protein Pathways:

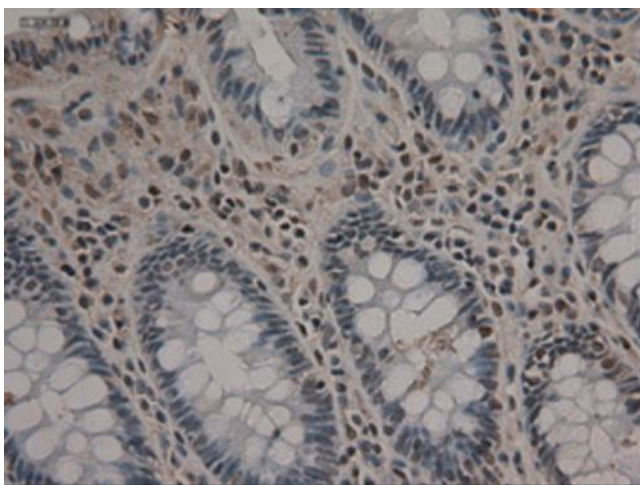
Dorso-ventral axis formation, Notch signaling pathway, Prion diseases

Product images:

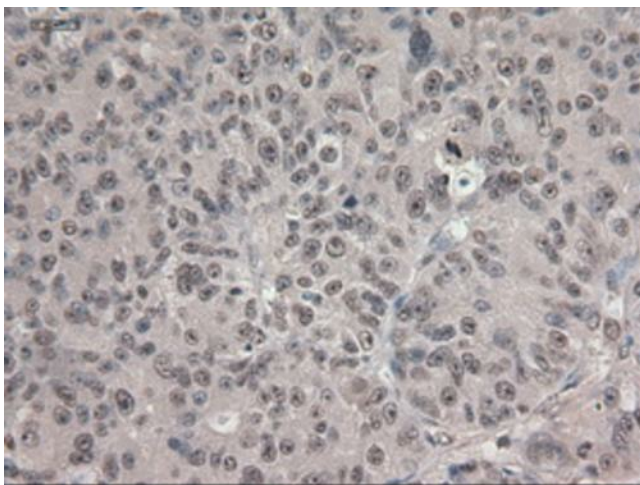
Immunohistochemical staining of paraffin-embedded Carcinoma of thyroid using anti-Notch1 (TA500078) mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



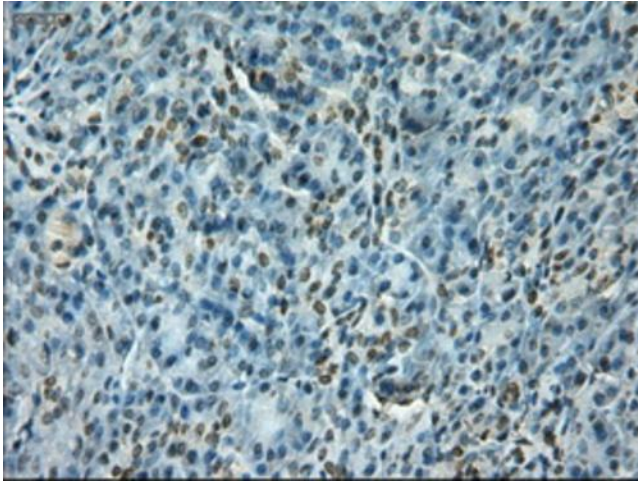
Immunohistochemical staining of paraffin-embedded thyroid within the normal limits using anti-Notch1 (TA500078) mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



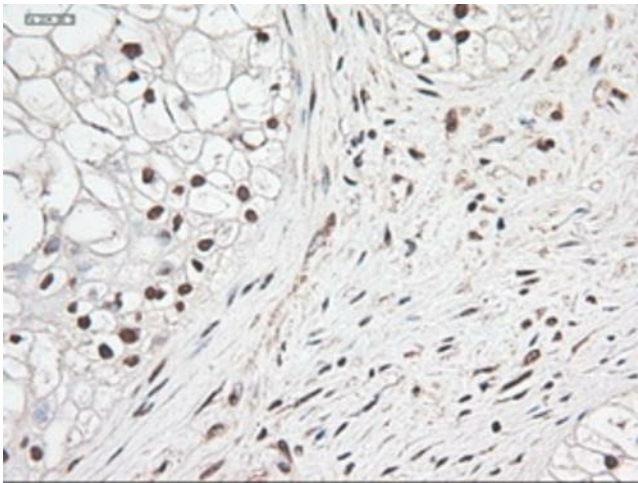
Immunohistochemical staining of paraffin-embedded colon within the normal limits using anti-Notch1 (TA500078) mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



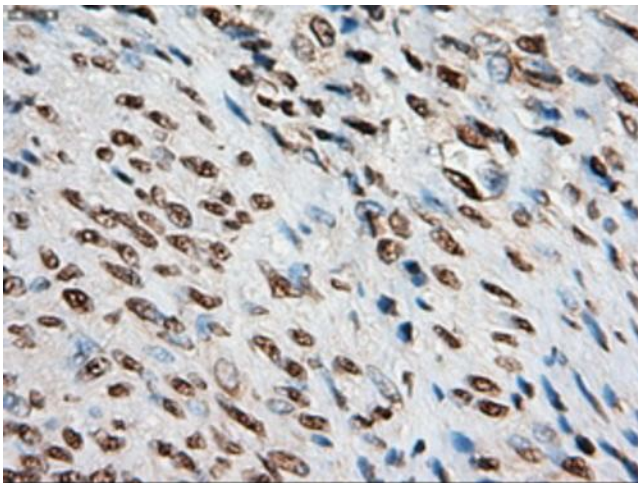
Immunohistochemical staining of paraffin-embedded Adenocarcinoma of ovary using anti-Notch1 (TA500078) mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



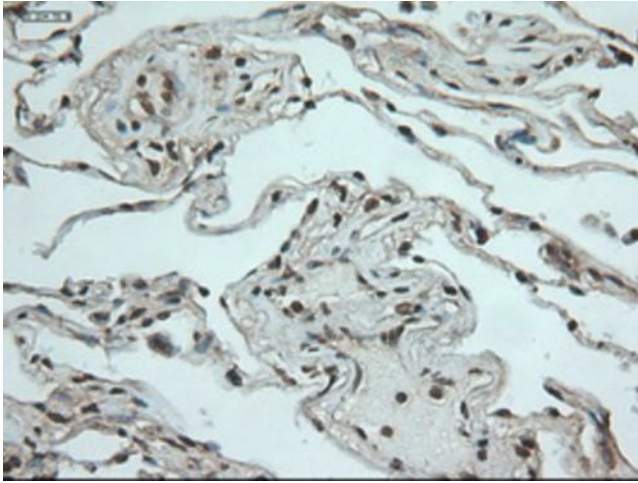
Immunohistochemical staining of paraffin-embedded pancreas within the normal limits using anti-Notch1 (TA500078) mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



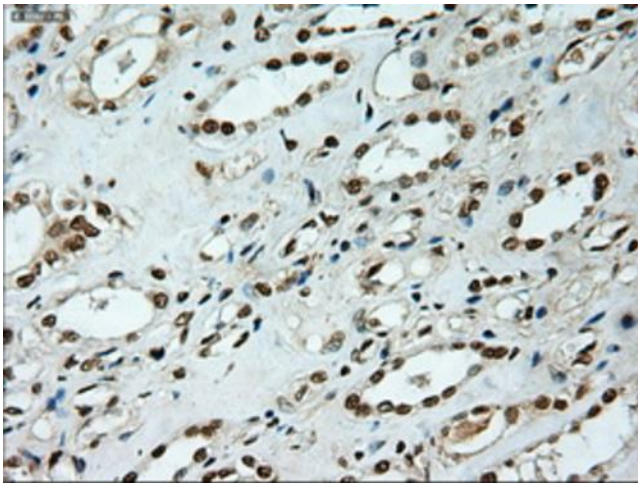
Immunohistochemical staining of paraffin-embedded Carcinoma of pancreas using anti-Notch1 (TA500078) mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



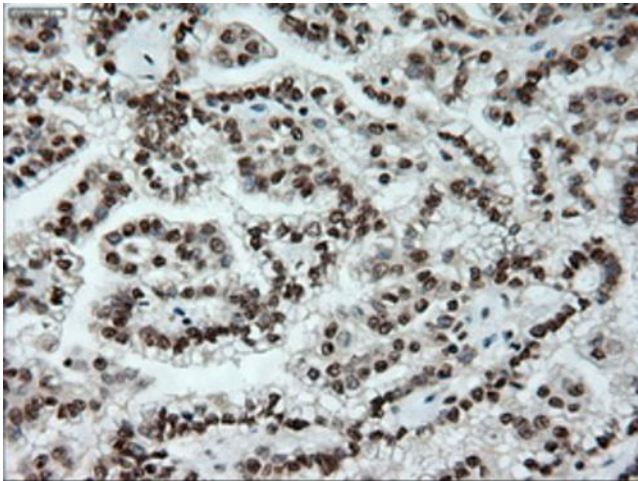
Immunohistochemical staining of paraffin-embedded endometrium within the normal limits using anti-Notch1 (TA500078) mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



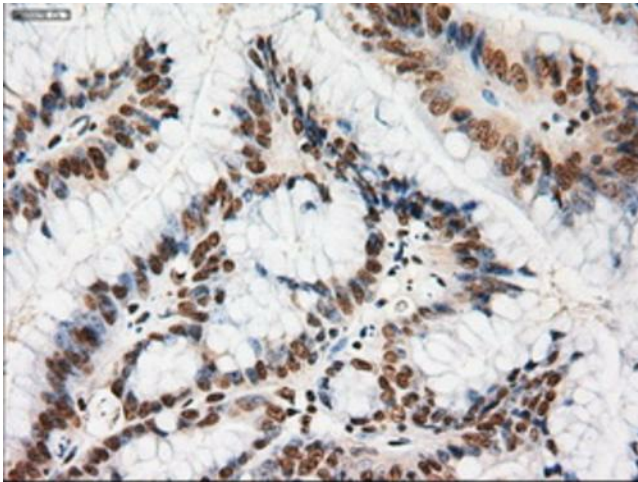
Immunohistochemical staining of paraffin-embedded lung within the normal limits using anti-Notch1 (TA500078) mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



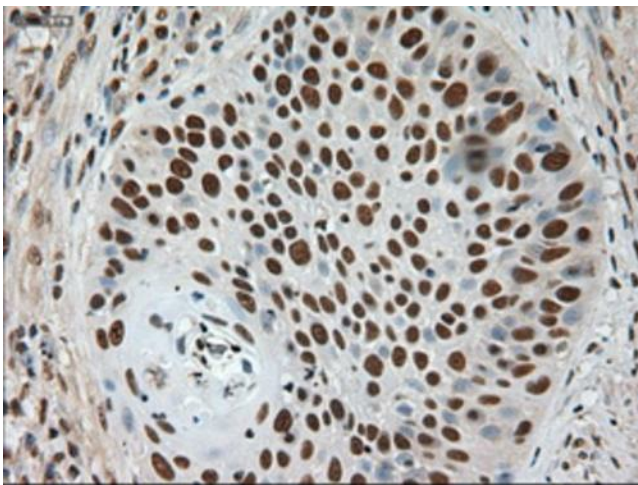
Immunohistochemical staining of paraffin-embedded kidney within the normal limits using anti-Notch1 (TA500078) mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



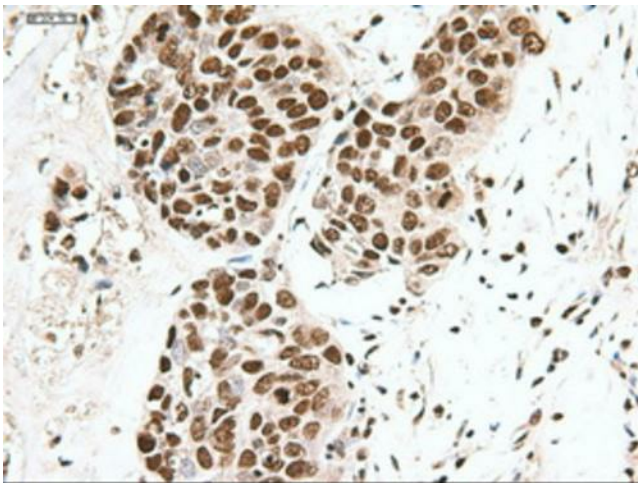
Immunohistochemical staining of paraffin-embedded Carcinoma of kidney using anti-Notch1 (TA500078) mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



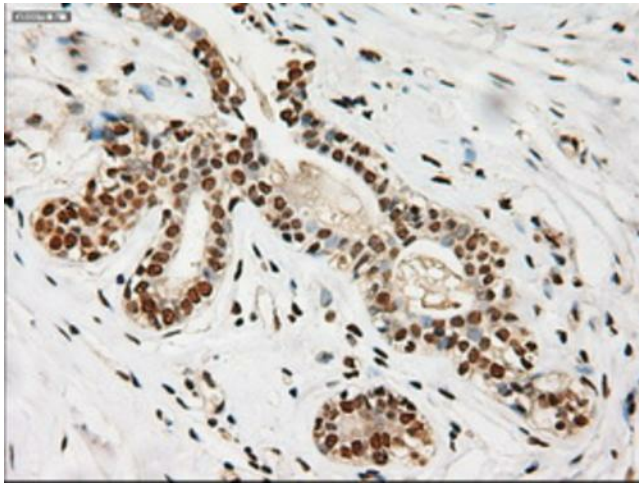
Immunohistochemical staining of paraffin-embedded Adenocarcinoma of colon using anti-Notch1 (TA500078) mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



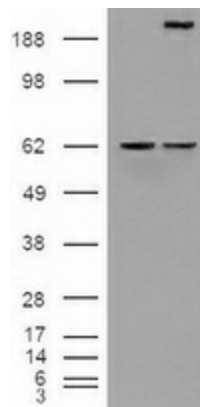
Immunohistochemical staining of paraffin-embedded Carcinoma of lung using anti-Notch1 (TA500078) mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



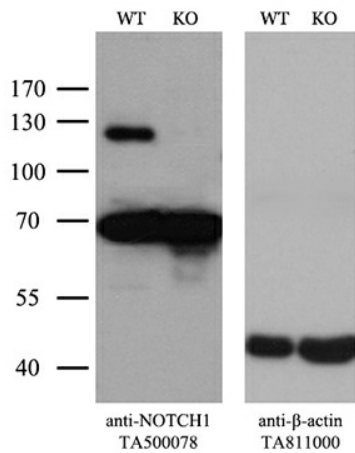
Immunohistochemical staining of paraffin-embedded Adenocarcinoma of breast using anti-Notch1 (TA500078) mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



Immunohistochemical staining of paraffin-embedded breast within the normal limits using anti-Notch1 (TA500078) mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY Notch1 (Cat# [RC211365], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-Notch1 (Cat# TA500078). Positive lysates [LY402602] (100ug) and [LC402602] (20ug) can be purchased separately from OriGene.



Equivalent amounts of cell lysates (10 ug per lane) of wild-type HeLa cells (WT, Cat# LC810HELA) and NOTCH1-Knockout HeLa cells (KO, Cat# [LC810153]) were separated by SDS-PAGE and immunoblotted with anti-NOTCH1 monoclonal antibody TA500078. Then the blotted membrane was stripped and reprobed with anti-β-actin antibody ([TA811000]) as a loading control (1:500).

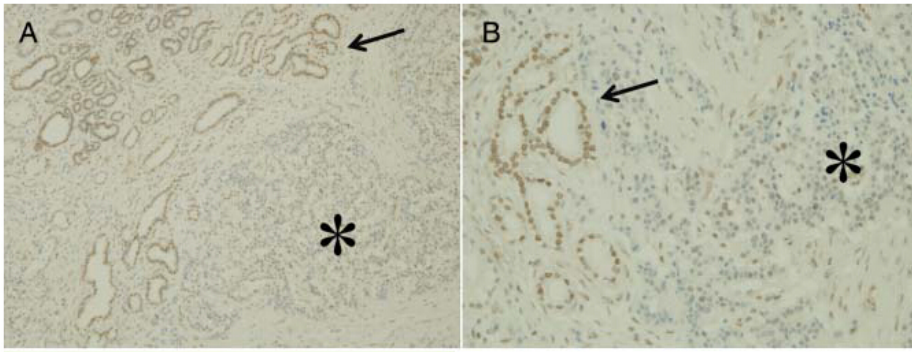
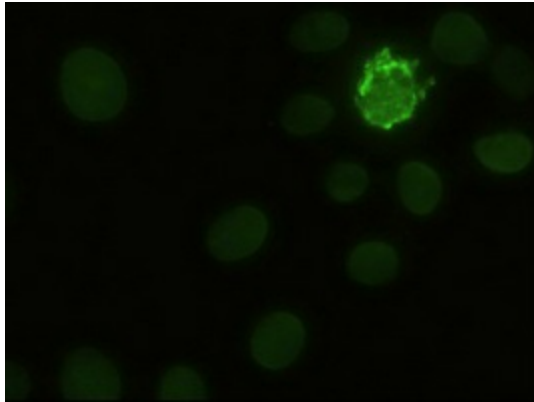
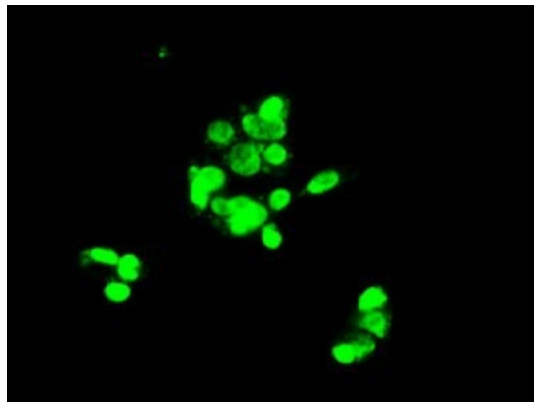


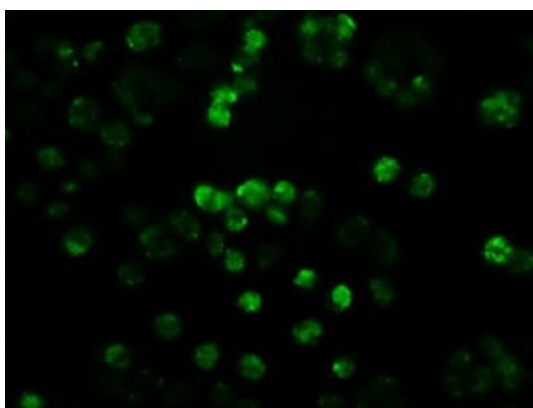
Figure from citation: Immunohistochemistry for Notch1: Comparative analysis of Notch1 expression between human adenocarcinomas and neuroendocrine tumours (NETs) by using anti-Notch 1 antibody. Nuclear expression is found in the adenocarcinomas (A and B, arrows), but rarely in NETs (A and B, *). Original magnification, (A), $\times 40$; (B), $\times 200$. Dilution: 1:40 [View Citation](#). Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



Anti-Notch1 mouse monoclonal antibody (TA500078) immunofluorescent staining of HeLa cells transiently transfected by pCMV6-ENTRY Notch1 ([RC211365])



Immunofluorescent staining of HepG2 cells using anti-Notch1 mouse monoclonal antibody (TA500078).



Immunofluorescent staining of HT29 cells using anti-Notch1 mouse monoclonal antibody (TA500078).