

OriGene Technologies, Inc.

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Product datasheet for TA500078

NOTCH1 Mouse Monoclonal Antibody [Clone ID: OTI3E12]

Product data:

Product Type: Primary Antibodies

Clone Name: OTI3E12
Applications: IF, IHC, WB

Recommend Dilution: WB: 1:1000; IHC 1;50; RPPA 1:75; IF: 1:100

Reactivity: Human
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)

Predicted Protein Size: 270.6 kDa

Gene Name: notch receptor 1

Database Link: NP 060087 Entrez Gene 4851 Human



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 Drosophilia, 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

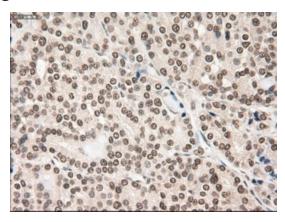
Synonyms: AOS5; AOVD1; hN1; TAN1

Protein Families: Adult stem cells, Cancer stem cells, Druggable Genome, ES Cell Differentiation/IPS, Stem cell

relevant signaling - DSL/Notch pathway

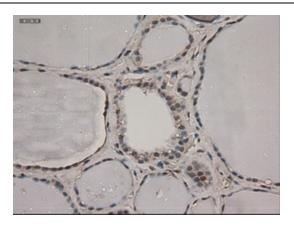
Protein Pathways: Dorso-ventral axis formation, Notch signaling pathway, Prion diseases

Product images:

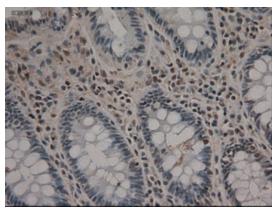


Immunohistochemical staining of paraffinembedded Carcinoma of thyroid using anti-Notch1 (TA500078) mouse monoclonal antibody (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min).

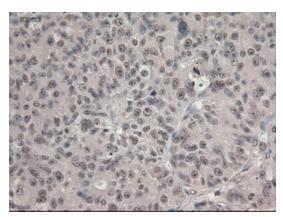




Immunohistochemical staining of paraffinembedded thyroid within the normal limits using anti-Notch1 (TA500078) mouse monoclonal antibody (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min).

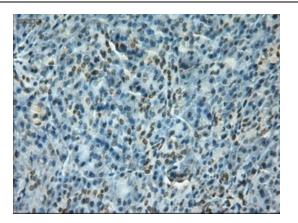


Immunohistochemical staining of paraffinembedded colon within the normal limits using anti-Notch1 (TA500078) mouse monoclonal antibody (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min).

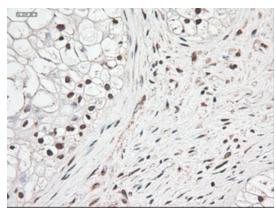


Immunohistochemical staining of paraffinembedded Adenocarcinoma of ovary using anti-Notch1 (TA500078) mouse monoclonal antibody (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min).

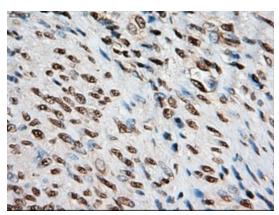




Immunohistochemical staining of paraffinembedded pancreas within the normal limits using anti-Notch1 (TA500078) mouse monoclonal antibody (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min).

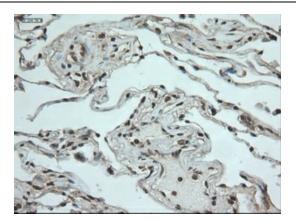


Immunohistochemical staining of paraffinembedded Carcinoma of pancreas using anti-Notch1 (TA500078) mouse monoclonal antibody (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min).

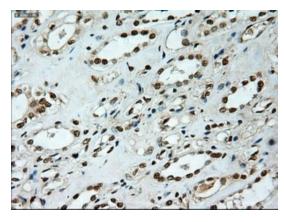


Immunohistochemical staining of paraffinembedded endometrium within the normal limits using anti-Notch1 (TA500078) mouse monoclonal antibody (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min).

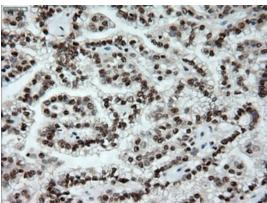




Immunohistochemical staining of paraffinembedded lung within the normal limits using anti-Notch1 (TA500078) mouse monoclonal antibody (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min).

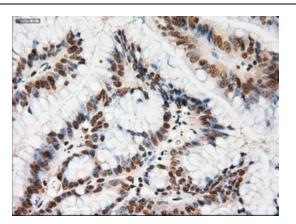


Immunohistochemical staining of paraffinembedded kidney within the normal limits using anti-Notch1 (TA500078) mouse monoclonal antibody (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min).

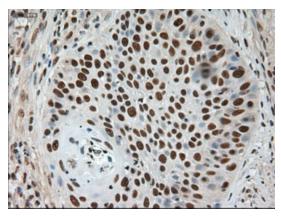


Immunohistochemical staining of paraffinembedded Carcinoma of kidney using anti-Notch1 (TA500078) mouse monoclonal antibody (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min).

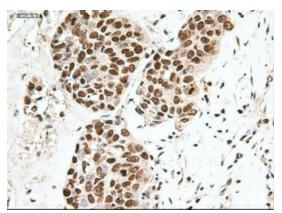




Immunohistochemical staining of paraffinembedded Adenocarcinoma of colon using anti-Notch1 (TA500078) mouse monoclonal antibody (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min).

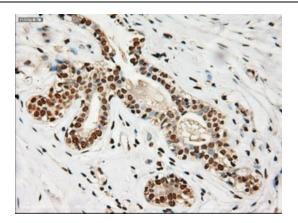


Immunohistochemical staining of paraffinembedded Carcinoma of lung using anti-Notch1 (TA500078) mouse monoclonal antibody (Heatinduced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min).

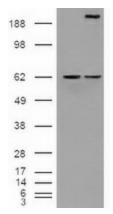


Immunohistochemical staining of paraffinembedded Adenocarcinoma of breast using anti-Notch1 (TA500078) mouse monoclonal antibody (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min).

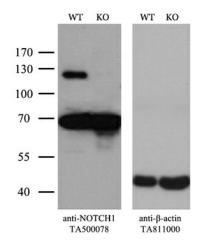




Immunohistochemical staining of paraffinembedded breast within the normal limits using anti-Notch1 (TA500078) mouse monoclonal antibody (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min).



HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY Notch1 ([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. 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-b-actin antibody ([TA811000]) as a loading control (1:500).



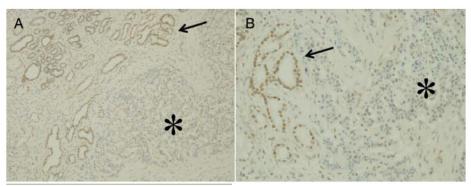
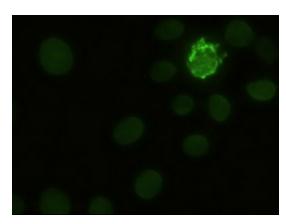
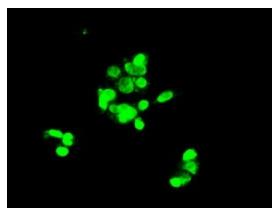


Figure from citation: Immunohistochemistry for Notch1: Comparative analysis of Notch1 expression between human adenocarcinomas and neuroendocrine tumours (NETs) by using anti-Notch 1 antibody. Nuclear expression is found in the adenocarcinomas (A and B, arrows), but rarely in NETs (A and B, *). Original magnification, (A), ×40; (B), ×200. Dilution: 1:40 View Citation

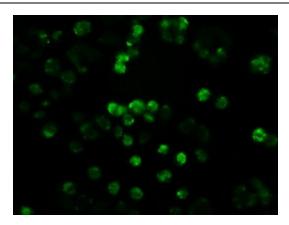


Anti-Notch1 mouse monoclonal antibody (TA500078) immunofluorescent staining of HeLa cells transiently transfected by pCMV6-ENTRY Notch1 ([RC211365])



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





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