Datasheet for ABIN2779440

anti-NOTCH4 antibody (Middle Region)

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Overview

Quantity:	100 µL
Target:	NOTCH4
Binding Specificity:	Middle Region
Reactivity:	Human, Cow, Horse, Guinea Pig, Pig, Dog, Rabbit
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This NOTCH4 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC)

Product Details

Immunogen:	The immunogen is a synthetic peptide directed towards the middle region of human NOTCH4
Sequence:	KALKPKAEVD EDGVVMCSGP EEGEEVGQAE ETGPPSTCQL WSLSGGCGAL
Predicted Reactivity:	Cow: 92%, Dog: 77%, Guinea Pig: 79%, Horse: 92%, Human: 100%, Pig: 100%, Rabbit: 79%
Characteristics:	This is a rabbit polyclonal antibody against NOTCH4. It was validated on Western Blot using a cell lysate as a positive control.
Purification:	Affinity Purified

Target Details

Target:	NOTCH4
Alternative Name:	NOTCH4 (NOTCH4 Products)

Target Details

Background:	NOTCH4 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. NOTCH4 is cleaved in the trans-Golgi network, and presented on the cell surface as a heterodimer. NOTCH4 functions as a receptor for membrane bound ligands, and may play a role in vascular, renal and hepatic development. NOTCH4 gene may be associated with susceptibility to schizophrenia in a small portion of cases. This gene encodes 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 a role in vascular, renal and hepatic development. This gene may be associated with susceptibility to schizophrenia in a small portion of cases. An alternative splice variant has been described but its biological nature has not been determined. Publication Note: This RefSeq record includes a subset of the publications that are available for this gene. Please see the Entrez Gene record to access additional publications. Alias Symbols: INT3, NOTCH4 Protein Interaction Partner: EGFL7, Dlg4, SMAD4, SMAD3, SMAD2, TCEB1, UBC, TP53, MDM2, MAML3, MAML2, FBXW7, MAML1, DLL4, PSEN2, NOTCH4, RBPJ, PSEN1, Protein Size: 2003
Molecular Weight:	58 kDa
Gene ID:	4855
NCBI Accession:	NM_004557, NP_004548

Target Details

UniProt:	Q99466
Pathways:	Notch Signaling

Application Details

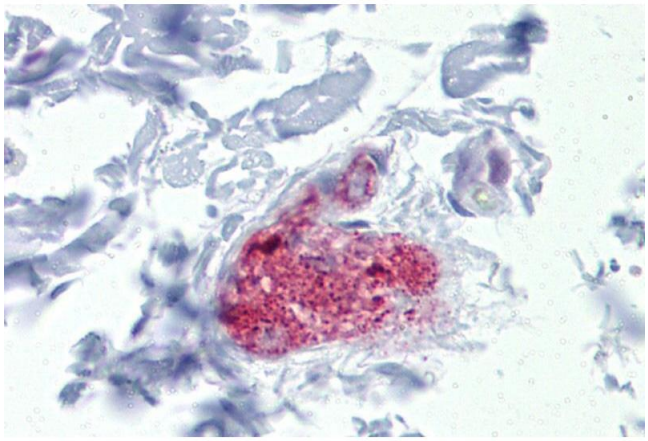
Application Notes:	Optimal working dilutions should be determined experimentally by the investigator.
Comment:	Antigen size: 2003 AA
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	Lot specific
Buffer:	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09 % (w/v) sodium azide and 2 % sucrose.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-20 °C
Storage Comment:	For short term use, store at 2-8°C up to 1 week. For long term storage, store at -20°C in small aliquots to prevent freeze-thaw cycles.

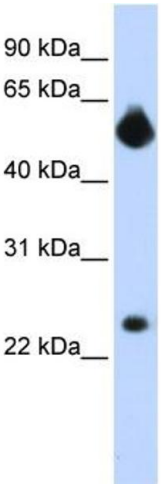
Publications

Product cited in:	Tang, Urs, Liaw: "Hairy-related transcription factors inhibit Notch-induced smooth muscle alpha-actin expression by interfering with Notch intracellular domain/CBF-1 complex interaction with the CBF-1-binding site." in: **Circulation research**, Vol. 102, Issue 6, pp. 661-8, (2008) (PubMed).



Immunohistochemistry

Image 1. Immunohistochemistry with Colon, submucosal plexus tissue at an antibody concentration of 5µg/ml using anti-NOTCH4 antibody (ARP32052_P050)



Western Blotting

Image 2. WB Suggested Anti-NOTCH4 Antibody Titration: 0.2-1 ug/ml ELISA Titer: 1:62500 Positive Control: HepG2 cell lysate