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Product datasheet

Anti-activated Notch1 antibody ab52301

48 References 画像数 2

製品の概要

製品名 Anti-activated Notch1 antibody

製品の詳細 Rabbit polyclonal to activated Notch1

由来種 Rabbit

特異性 ab52301 detects endogenous levels of fragment of activated Notch 1 resulting from cleavage

adjacent to Val1744.

アプリケーション 適用あり: IHC-P, WB

種交差性 交差種: Mouse, Human

免疫原 Synthetic peptide corresponding to Human activated Notch1 aa 1700-1800.

Database link: P46531

Run BLAST with
Run BLAST with

特記事項 ab52301 is cleaved at Val 1744

The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C.

Avoid freeze / thaw cycle.

バッファー pH: 7

Preservative: 0.02% Sodium azide

Constituents: 50% Glycerol, 0.87% Sodium chloride, PBS

PBS without Mg+2 and Ca+2

精製度 Immunogen affinity purified

特記事項(精製) ab52301 was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-

1

specific immunogen.

ポリ/モノ ポリクローナル

アイソタイプ IgG

アプリケーション

The Abpromise guarantee <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab52301の使用に適用されます アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
IHC-P		Use at an assay dependent concentration.
WB		1/500 - 1/1000. Detects a band of approximately 95 kDa (predicted molecular weight: 272 kDa).

ターゲット情報

機能

Functions as a receptor for membrane-bound ligands Jagged1, Jagged2 and Delta1 to regulate cell-fate determination. Upon ligand activation through the released notch intracellular domain (NICD) it forms a transcriptional activator complex with RBPJ/RBPSUH and activates genes of the enhancer of split locus. Affects the implementation of differentiation, proliferation and apoptotic programs. May be important for normal lymphocyte function. In altered form, may contribute to transformation or progression in some T-cell neoplasms. Involved in the maturation of both CD4+ and CD8+ cells in the thymus. May be important for follicular differentiation and possibly cell fate selection within the follicle. During cerebellar development, may function as a receptor for neuronal DNER and may be involved in the differentiation of Bergmann glia. Represses neuronal and myogenic differentiation. May enhance HIF1A function by sequestering HIF1AN away from HIF1A.

組織特異性

In fetal tissues most abundant in spleen, brain stem and lung. Also present in most adult tissues where it is found mainly in lymphoid tissues.

関連疾患

Defects in NOTCH1 are a cause of aortic valve disease 1 (AOVD1) [MIM:109730]. A common defect in the aortic valve in which two rather than three leaflets are present. It is often associated with aortic valve calcification and insufficiency. In extreme cases, the blood flow may be so restricted that the left ventricle fails to grow, resulting in hypoplastic left heart syndrome.

配列類似性

Belongs to the NOTCH family. Contains 5 ANK repeats. Contains 36 EGF-like domains.

Contains 3 LNR (Lin/Notch) repeats.

翻訳後修飾

Synthesized in the endoplasmic reticulum as an inactive form which is proteolytically cleaved by a furin-like convertase in the trans-Golgi network before it reaches the plasma membrane to yield an active, ligand-accessible form. Cleavage results in a C-terminal fragment N(TM) and a N-terminal fragment N(EC). Following ligand binding, it is cleaved by TNF-alpha converting enzyme (TACE) to yield a membrane-associated intermediate fragment called notch extracellular truncation (NEXT). Following endocytosis, this fragment is then cleaved by presenilin dependent gamma-secretase to release a notch-derived peptide containing the intracellular domain (NICD) from the membrane.

Phosphorylated.

O-glycosylated on the EGF-like domains. Contains both O-linked fucose and O-linked glucose. Ubiquitinated; undergoes 'Lys-29'-linked polyubiquitination catalyzed by ITCH. Monoubiquitination at Lys-1759 is required for activation by gamma-secretase cleavage, it promotes interaction with AAK1, which stabilizes it. Deubiquitination by EIF3F is necessary for nuclear import of activated Notch.

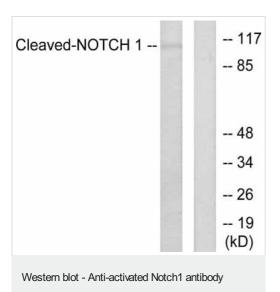
Hydroxylated at Asn-1955 by HIF1AN. Hydroxylated at Asn-2022 by HIF1AN (By similarity). Hydroxylation reduces affinity for HI1AN and may thus indirectly modulate negative regulation of NICD.

細胞内局在

(ab52301)

Cell membrane and Nucleus. Following proteolytical processing NICD is translocated to the nucleus.

画像



All lanes : Anti-activated Notch1 antibody (ab52301) at 1/500 dilution

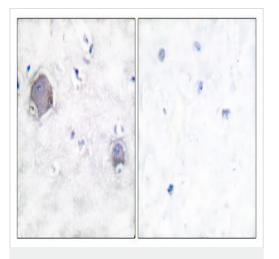
Lane 1: NIH 3T3 cell extract treated with etoposide

(25µM, 1 hour)

Lane 2: NIH 3T3 cell extract treated with etoposide

(25µM, 1 hour) with immunising peptide

Predicted band size: 272 kDa **Observed band size:** 95 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-activated Notch1 antibody (ab52301)

Immunohistochemical analysis of paraffin-embedded human brain tissue sections labeling activated Notch1 with ab52301 at a dilution of 1/100. The picture on the right is treated with the synthesized peptide.

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