

Datasheet: AHP2182

Description:	GOAT ANTI HUMAN NOTCH 3 (C-TERMINAL)
Specificity:	NOTCH 3 (C-TERMINAL)
Other names:	Neurogenic locus notch homolog protein 3
Format:	Purified
Product Type:	Polyclonal Antibody
Isotype:	Polyclonal IgG
Quantity:	50 µg

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry			▪	
Immunohistology - Frozen			▪	
Immunohistology - Paraffin (1)	▪			5ug/ml
ELISA	▪			1:16000
Immunoprecipitation			▪	
Western Blotting			▪	
Functional Assays			▪	

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

(1) This product requires antigen retrieval using heat treatment prior to staining of paraffin sections. Sodium citrate buffer pH 6.0 is recommended for this purpose.

Target Species	Human
Species Cross Reactivity	<p>Reacts with: Gorilla, Monkey, Mouse, Rat</p> <p>N.B. Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.</p>
Product Form	Purified IgG - liquid

Antiserum Preparation Antisera to human NOTCH3 (C-Terminal) were raised by repeated immunisation of goats with highly purified antigen. Purified IgG prepared from whole serum by affinity chromatography.

Buffer Solution TRIS buffered saline

Preservative 0.02% Sodium Azide (NaN₃)
Stabilisers 0.5% Bovine Serum Albumin

Approx. Protein Concentrations IgG concentration 0.5mg/ml

Immunogen A synthetic peptide sequence corresponding to amino acid residues from the C-Terminus of Human NOTCH3.

External Database

Links

UniProt:

[Q9UM47](#)

[Related reagents](#)

Entrez Gene:

[4854](#)

NOTCH3

[Related reagents](#)

RRID

AB_10709281

Specificity

Goat anti Human Notch 3 antibody recognizes Notch 3, one of the four major transmembrane receptors (Notch 1-4) of the Notch signalling pathway, which is activated through binding to DSL domain-containing membrane-bound specific ligands.

The Notch signalling pathway is an evolutionarily conserved pathway in multi-cellular organisms, which is vital for cell-cell communication, important during fundamental developmental and physiological processes, including regulation of cell fate decisions during neuronal, cardiac and endocrine development, stem cell haematopoiesis, thymic T-cell development, and both tumour progression and suppression.

Ligation of Notch receptors by their specific ligands, Jagged1 (CD339), Jagged2, Delta-like protein 1 (DLL1), DLL3 and DLL4, on physically adjacent signal receiving cells, induces proteolysis of the receptors by ADAM-family metalloproteases and gamma-secretase complex, within the transmembrane domain, releasing the Notch intracellular domain (NICD) to translocate to the nucleus. Subsequent signal transduction then occurs through either the CSL-NICD-Mastermind complex cascade (canonical pathway), or NF-kappaB-NICD and CSL-NICD-Deltex complex signalling cascades (non-canonical pathway). The canonical pathway inhibits the differentiation of stem cells or progenitor cells, whilst the non-canonical pathway promotes differentiation.

Notch 3 is primarily expressed by proliferating neuroepithelium and arterial smooth muscle cells, and may play a role during CNS development. Notch 3 is also present on some thymocytes subsets and Treg cells, and Notch 3 signalling plays a role in mammalian T cell lineage commitment, thymocyte development, and stem cell haematopoiesis. Studies

have implicated the over-expression of Notch 3 in T-cell leukaemia.

In humans, mutations in the Notch3 gene are responsible for the heritable vascular dementia known as CADASIL (cerebral autosomal dominant arteriopathy with subcortical infarcts and leukoencephalopathy syndrome), predisposing to early onset stroke. Studies have implicated Notch 3 as crucial for ErbB2-negative breast cancer development, and possibly as a therapeutic target for these tumours, which at present lack effective molecular targets.

Histology Positive Control Tissue	Human liver
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Storage	Store at +4°C or at -20°C if preferred. Storage in frost-free freezers is not recommended. This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.
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Guarantee	12 months from date of despatch.
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Health And Safety Information	Material Safety Datasheet documentation #10058 available at: 10058: https://www.bio-rad-antibodies.com/uploads/MSDS/10058.pdf
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Regulatory	For research purposes only
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Related Products

Recommended Secondary Antibodies

Donkey Anti Sheep IgG (STAR88...) [HRP](#)

Recommended Negative Controls

[HISTAR DETECTION SYSTEM \(STAR3000A\)](#)

Recommended Useful Reagents

[ANTIGEN RETRIEVAL BUFFER, pH8.0 \(BUF025A\)](#)

[100x ANTIGEN RETRIEVAL BUFFER, pH8.0 \(BUF025C\)](#)

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