abcam

Product datasheet

Recombinant Human Notch2 protein ab114827

1 Image

Description

Product name	Recombinant Human Notch2 protein
Expression system	Wheat germ
Accession	**Q04721**
Protein length	Protein fragment
Animal free	No
Nature	Recombinant
Species	Human
Sequence	QCRDGYEPCVNEGMCVTYHNGTGYCKCPEGFLGEYCQH RDPCEKNRCQNG GTCVAQAMLGKATCRCASGFTGEDCQYSTSHPCFVSRP CLNGGTCHMLSR DTYECTCQVG
Predicted molecular weight	38 kDa including tags
Amino acids	27 to 136

Specifications

Our **Abpromise guarantee** covers the use of **ab114827** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	ELISA SDS-PAGE Western blot
Form	Liquid

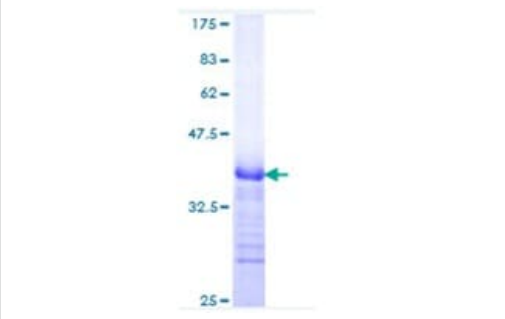
Preparation and Storage

Stability and Storage	Shipped on dry ice. Upon delivery aliquot and store at -80ºC. Avoid freeze / thaw cycles. pH: 8.00 Constituents: 0.3% Glutathione, 0.79% Tris HCl

General Info

Function	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 (By similarity). Involved in bone remodeling and homeostasis. In collaboration with RELA/p65 enhances NFATc1 promoter activity and positively regulates RANKL-induced osteoclast differentiation. Positively regulates self-renewal of liver cancer cells (PubMed:25985737).
Tissue specificity	Expressed in the brain, heart, kidney, lung, skeletal muscle and liver. Ubiquitously expressed in the embryo.
Involvement in disease	Alagille syndrome 2 Hajdu-Cheney syndrome
Sequence similarities	Belongs to the NOTCH family. Contains 6 ANK repeats. Contains 35 EGF-like domains. Contains 3 LNR (Lin/Notch) repeats.
Post-translational modifications	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). This fragment is then cleaved by presenilin dependent gamma-secretase to release a notch-derived peptide containing the intracellular domain (NICD) from the membrane. Hydroxylated by HIF1AN. Can be either O-glucosylated or O-xylosylated at Ser-613 by POGLUT1.
Cellular localization	Cell membrane and Nucleus. Cytoplasm. Following proteolytical processing NICD is translocated to the nucleus. Retained at the cytoplasm by C8orf4 (PubMed:25985737).

Images



SDS-PAGE - Recombinant Human Notch2 protein (ab114827)

12.5% SDS-PAGE Stained with Coomassie Blue

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours

- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit **https://www.abcam.com/abpromise** or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors