

RBPJ Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP17401A

Specification

RBPJ Antibody (N-term) - Product Information

Application IF, WB, IHC-P,E

Primary Accession <u>Q06330</u>

Other Accession <u>NP_976028.1</u>, <u>NP_005340.2</u>

Reactivity
Host
Clonality
Polyclonal
Isotype
Calculated MW
Antigen Region

Human
Rabbit
Polyclonal
Rabbit IgG
Tabbit IgG

RBPJ Antibody (N-term) - Additional Information

Gene ID 3516

Other Names

Recombining binding protein suppressor of hairless, CBF-1, J kappa-recombination signal-binding protein, RBP-J kappa, RBP-J, RBP-JK, Renal carcinoma antigen NY-REN-30, RBPJ, IGKJRB, IGKJRB1, RBPJK, RBPSUH

Target/Specificity

This RBPJ antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-29 amino acids from the N-terminal region of human RBPJ.

Dilution

IF~~1:10~50 WB~~1:2000 IHC-P~~1:10~50

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

RBPJ Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

RBPJ Antibody (N-term) - Protein Information



Name RBPJ (HGNC:5724)

Function Transcriptional regulator that plays a central role in Notch signaling, a signaling pathway involved in cell-cell communication that regulates a broad spectrum of cell-fate determinations. Acts as a transcriptional repressor when it is not associated with Notch proteins. When associated with some NICD product of Notch proteins (Notch intracellular domain), it acts as a transcriptional activator that activates transcription of Notch target genes. Probably represses or activates transcription via the recruitment of chromatin remodeling complexes containing histone deacetylase or histone acetylase proteins, respectively. Specifically binds to the immunoglobulin kappa-type J segment recombination signal sequence. Binds specifically to methylated DNA (PubMed:21991380). Binds to the oxygen responsive element of COX4I2 and activates its transcription under hypoxia conditions (4% oxygen) (PubMed:23303788). Negatively regulates the phagocyte oxidative burst in response to bacterial infection by repressing transcription of NADPH oxidase subunits (By similarity).

Cellular Location

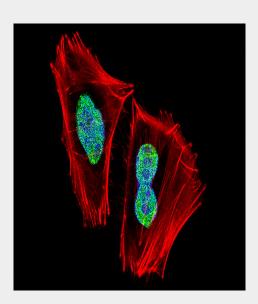
Nucleus. Cytoplasm. Note=Mainly nuclear, upon interaction with RITA/C12orf52, translocates to the cytoplasm, down- regulating the Notch signaling pathway

RBPJ Antibody (N-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

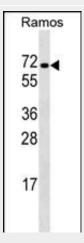
RBPJ Antibody (N-term) - Images



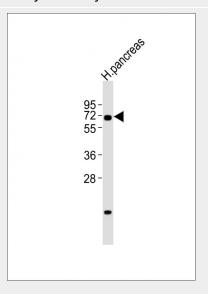
Fluorescent confocal image of A2058 cell stained with RBPJ Antibody (N-term)(Cat#AP17401a). A2058 cells were fixed with 4% PFA (20 min), permeabilized with Triton X-100 (0.1%, 10 min), then incubated with RBPJ primary antibody (1:25, 1 h at 37°C). For secondary antibody, Alexa



Fluor® 488 conjugated donkey anti-rabbit antibody (green) was used (1:400, 50 min at 37° C).Cytoplasmic actin was counterstained with Alexa Fluor® 555 (red) conjugated Phalloidin (7units/ml, 1 h at 37° C). Nuclei were counterstained with DAPI (blue) (10 µg/ml, 10 min). RBPJ immunoreactivity is localized to nucleus significantly.

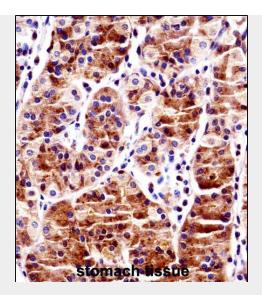


RBPJ Antibody (N-term) (Cat. #AP17401a) western blot analysis in Ramos cell line lysates (35ug/lane). This demonstrates the RBPJ antibody detected the RBPJ protein (arrow).



Anti-RBPJ Antibody (N-term) at 1:2000 dilution + human pancreas lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 56 kDa Blocking/Dilution buffer: 5% NFDM/TBST.





RBPJ Antibody (N-term) (AP17401a)immunohistochemistry analysis in formalin fixed and paraffin embedded human stomach tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of RBPJ Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.

RBPJ Antibody (N-term) - Background

Transcriptional regulator that plays a central role in Notch signaling, a signaling pathway involved in cell-cell communication that regulates a broad spectrum of cell-fate. determinations. Acts as a transcriptional repressor when it is not associated with Notch proteins. When associated with some Notch protein, it acts as a transcriptional activator that activates transcription of Notch target genes. Probably represses or activates transcription via the recruitment of chromatin remodeling complexes containing histone deacetylase or histone acetylase proteins, respectively. Specifically binds to the immunoglobulin kappa-type J segment recombination signal sequence.

RBPJ Antibody (N-term) - References

Chari, S., et al. J. Immunol. 185(1):410-417(2010) Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010): Roberts, K.E., et al. Gastroenterology 139(1):130-139(2010) Stahl, E.A., et al. Nat. Genet. 42(6):508-514(2010) Johnson, S.E., et al. J. Biol. Chem. 285(9):6681-6692(2010)