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RBPJ Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP17401A

Product Information

Application	WB, IHC-P, IF, E
Primary Accession	Q06330
Other Accession	NP_976028.1, NP_005340.2
Reactivity	Human, Rat, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB36620
Calculated MW	55637
Antigen Region	1-29

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	WB~~1:1000 IHC-P~~1:100~500 IF~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
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.

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

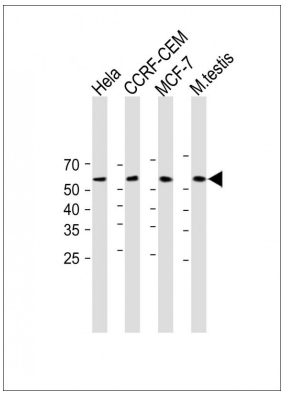
Background

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.

References

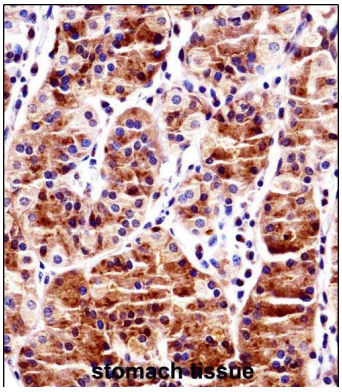
Chari, S., et al. J. Immunol. 185(1):410-417(2010)
Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) :
Roberts, K.E., et al. Gastroenterology 139(1):130-139(2010)
Stahl, E.A., et al. Nat. Genet. 42(6):508-514(2010)
Johnson, S.E., et al. J. Biol. Chem. 285(9):6681-6692(2010)

Images



All lanes : Anti-RBPJ Antibody (N-term) at 1:1000 dilution Lane 1: Hela whole cell lysate Lane 2: CCRF-CEM whole cell lysate Lane 3: MCF-7 whole cell lysate Lane 4: Mouse testis lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size : 56kDa 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.

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.