

Summary

Production Name	ADAR1 Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	IHC-P,IF-P,IF-F,ICC/IF,WB,ELISA
Reactivity	Human,Mouse,Rat

Performance

Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
Purification	Affinity purification

Immunogen

Gene Name	ADAR
Alternative Names	ADAR; ADAR1; DSRAD; G1P1; IFI4; Double-stranded RNA-specific adenosine deaminase; DRADA; 136 kDa double-stranded RNA-binding protein; p136; Interferon-inducible protein 4; IFI-4; K88DSRBP
Gene ID	103.0
SwissProt ID	P55265. The antiserum was produced against synthesized peptide derived from human ADAR1. AA range:1172-1221

Application

Dilution Ratio	WB 1:500-2000, IHC-P 1:100-1:300, ELISA 1:20000, IF-P/IF-F/ICC/IF 1:50-200
Molecular Weight	135kDa

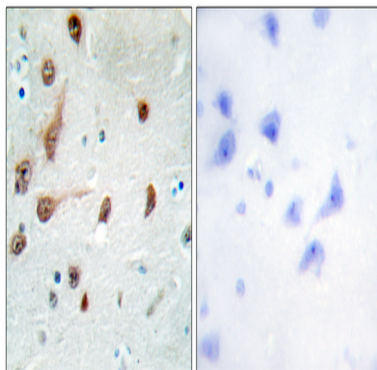
Background

adenosine deaminase, RNA specific(ADAR) Homo sapiens This gene encodes the enzyme responsible for RNA editing by site-specific deamination of adenosines. This enzyme destabilizes double-stranded RNA through conversion of adenosine to inosine. Mutations in this gene have been associated with dyschromatosis symmetrica hereditaria. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jul 2010],caution:The N-terminus of isoform 4 has been derived from EST and genomic sequences.,disease:Defects in ADAR are a cause of dyschromatosis symmetrical hereditaria (DSH) [MIM:127400]; also known as reticulate acropigmentation of Dohi. DSH is a pigmentary genodermatosis of autosomal dominant inheritance characterized by a mixture of hyperpigmented and hypopigmented macules distributed on the dorsal parts of the hands and feet.,function:Converts multiple adenosines to inosines and creates I/U mismatched base pairs in double-helical RNA substrates without apparent sequence specificity. Has been found to modify more frequently adenosines in AU-rich regions, probably due to the relative ease of melting A/U base pairs as compared to G/C pairs. Functions to modify viral RNA genomes and may be responsible for hypermutation of certain negative-stranded viruses. Edits the messenger RNAs for glutamate receptor (GLUR) subunits by site-selective adenosine deamination. Produces low-level editing at the GLUR-B Q/R site, but edits efficiently at the R/G site and HOTSPOT1. Binds to short interfering RNAs (siRNA) without editing them and suppresses siRNA-mediated RNA interference. Binds to ILF3/NF90 and up-regulates ILF3-mediated gene expression.,induction:Isoform 1 is induced by interferon alpha. Isoform 5 is constitutively expressed.,PTM:Sumoylation reduces RNA-editing activity.,similarity:Contains 1 A to I editase domain.,similarity:Contains 2 DRADA repeats.,similarity:Contains 3 DRBM (double-stranded RNA-binding) domains.,subcellular location:Isoform 1 is found predominantly in cytoplasm but appears to shuttle between the cytoplasm and nucleus. Isoform 5 is found exclusively in the nucleolus.,subunit:Homodimer. Isoform 1 interacts with ILF2/NF45 and ILF3/NF90.,tissue specificity:Ubiquitously expressed, highest levels were found in brain and lung.,

Research Area

Cytosolic DNA-sensing pathway;

Image Data



Product Name: ADAR1 Rabbit Polyclonal Antibody
Catalog #: APRab06604



Immunohistochemistry analysis of paraffin-embedded human brain tissue, using ADAR1 Antibody. The picture on the right is blocked with the synthesized peptide.

Note

For research use only.