Best Tools for immunology Research

ADAR1 Polyclonal Antibody

Catalog No :	YT0118
Reactivity :	Human;Mouse;Rat
Applications :	IHC;IF;WB;ELISA
Target :	ADAR1
Fields :	>>Cytosolic DNA-sensing pathway;>>Measles;>>Influenza A;>>Coronavirus disease - COVID-19
Gene Name :	ADAR
Protein Name :	Double-stranded RNA-specific adenosine deaminase
Human Gene Id :	103
Human Swiss Prot No :	P55265
Mouse Gene Id :	56417
Mouse Swiss Prot No :	Q99MU3
Rat Gene Id :	81635
Rat Swiss Prot No :	P55266
Immunogen :	The antiserum was produced against synthesized peptide derived from human ADAR1. AA range:1172-1221
Specificity :	ADAR1 Polyclonal Antibody detects endogenous levels of ADAR1 protein.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Polyclonal, Rabbit,IgG
Dilution :	WB 1:500-2000 IHC 1:100 - 1:300. ELISA: 1:20000.. IF 1:50-200

Purification : The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.

Concentration : 1 mg/ml

Storage Stability : -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band : 135kD

Cell Pathway : Cytosolic DNA-sensing pathway;

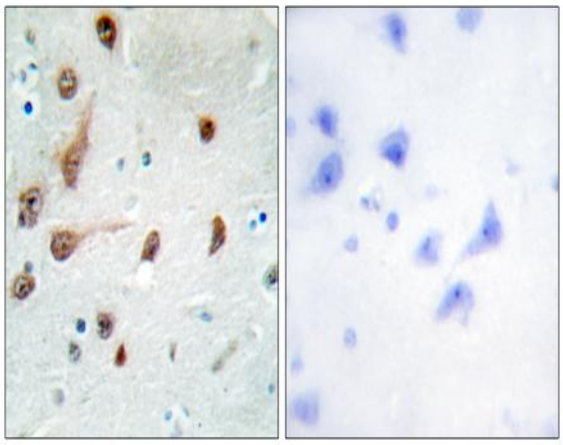
Background : adenosine deaminase, RNA specific(ADAR) Homo sapiens This gene encodes the enzyme responsible for RNA editing by site-specific deamination of adenosines. This enzyme destabilizes double-stranded RNA through conversion of adenosine to inosine. Mutations in this gene have been associated with dyschromatosis symmetrica hereditaria. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jul 2010],

Function : 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 glutama

Subcellular Location : [Isoform 1]: Cytoplasm . Nucleus . Shuttles between the cytoplasm and nucleus (PubMed:7565688, PubMed:24753571). Nuclear import is mediated by TNPO1 (PubMed:24753571). .; [Isoform 5]: Cytoplasm . Nucleus . Nucleus, nucleolus . Predominantly nuclear but can shuttle between nucleus and cytoplasm. TNPO1 can mediate its nuclear import whereas XPO5 can mediate its nuclear export. .

Expression : Ubiquitously expressed, highest levels were found in brain and lung (PubMed:7972084). Isoform 5 is expressed at higher levels in astrocytomas as compared to normal brain tissue and expression increases strikingly with the severity of the tumor, being higher in the most aggressive tumors.

Products Images



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