

**ADAR2 Antibody**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP50962****Specification**

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**ADAR2 Antibody - Product Information**

Application	WB, ICC, IHC-P, E
Primary Accession	<a href="#">P78563</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	80 KDa

**ADAR2 Antibody - Additional Information****Gene ID** 104**Other Names**

Double-stranded RNA-specific editase 1, RNA-editing deaminase 1, RNA-editing enzyme 1, dsRNA adenosine deaminase, ADARB1, ADAR2, DRADA2, RED1

**Dilution**

WB~~1:1000  
ICC~~N/A  
IHC-P~~N/A  
E~~N/A

**Format**

0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%

**Storage**

Store at -20 °C. Stable for 12 months from date of receipt

**ADAR2 Antibody - Protein Information****Name** ADARB1 ([HGNC:226](#))**Function**

Catalyzes the hydrolytic deamination of adenosine to inosine in double-stranded RNA (dsRNA) referred to as A-to-I RNA editing. This may affect gene expression and function in a number of ways that include mRNA translation by changing codons and hence the amino acid sequence of proteins; pre-mRNA splicing by altering splice site recognition sequences; RNA stability by changing sequences involved in nuclease recognition; genetic stability in the case of RNA virus genomes by changing sequences during viral RNA replication; and RNA structure-dependent activities such as microRNA production or targeting or protein-RNA interactions. Can edit both viral and cellular RNAs and can edit RNAs at multiple sites (hyper-editing) or at specific sites (site-specific editing). Its cellular RNA substrates include: bladder cancer-associated protein (BLCAP), neurotransmitter receptors for glutamate (GRIA2 and GRIK2) and serotonin (HTR2C),

GABA receptor (GABRA3) and potassium voltage-gated channel (KCNA1). Site-specific RNA editing of transcripts encoding these proteins results in amino acid substitutions which consequently alter their functional activities. Edits GRIA2 at both the Q/R and R/G sites efficiently but converts the adenosine in hotspot1 much less efficiently. Can exert a proviral effect towards human immunodeficiency virus type 1 (HIV-1) and enhances its replication via both an editing-dependent and editing-independent mechanism. The former involves editing of adenosines in the 5'UTR while the latter occurs via suppression of EIF2AK2/PKR activation and function. Can inhibit cell proliferation and migration and can stimulate exocytosis.

#### **Cellular Location**

Nucleus. Nucleus, nucleolus. Note=Shuttles between nucleoli and the nucleoplasm. [Isoform 2]: Nucleus. Nucleus, nucleolus

#### **Tissue Location**

Highly expressed in brain and heart and at lower levels in placenta. Fair expression in lung, liver and kidney. Detected in brain, heart, kidney, lung and liver (at protein level)

### **ADAR2 Antibody - Protocols**

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### **ADAR2 Antibody - Images**

### **ADAR2 Antibody - Background**

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### **ADAR2 Antibody - References**

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