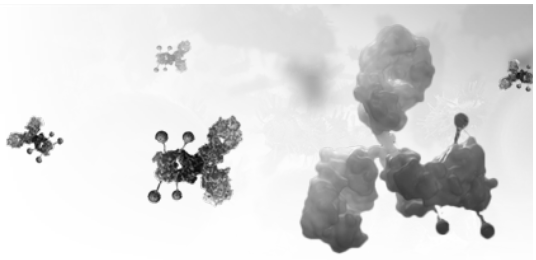

Anti-ADARB1 (aa 34-273) polyclonal antibody (DPABH-14415)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Antigen Description	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 5UTR while the latter occurs via suppression of EIF2AK2/PKR activation and function. Can inhibit cell proliferation and migration and can stimulate exocytosis.
Immunogen	Recombinant fragment within Human RED1 aa 34-273. The exact sequence is proprietary.Database link: P78563
Isotype	IgG
Source/Host	Rabbit
Species Reactivity	Human
Purification	Immunogen affinity purified

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Conjugate	Unconjugated
Applications	WB
Format	Liquid
Size	100 µl
Buffer	pH: 7.00; Constituents: 20% Glycerol, 0.75% Glycine, 1.21% Tris
Preservative	None
Storage	Shipped at 4°C. Store at 4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.

GENE INFORMATION

Gene Name	ADARB1 adenosine deaminase, RNA-specific, B2 [Homo sapiens]
Official Symbol	ADARB1
Synonyms	ADARB1; adenosine deaminase, RNA-specific, B1; RED1; ADAR2; DRABA2; DRADA2; double-stranded RNA-specific editase 1; RNA editase; RED1 homolog; RNA-editing enzyme 1; RNA editing deaminase 1; RNA-editing deaminase 1; dsRNA adenosine deaminase DRADA2; adenosine deaminase, RNA-specific, B1 (RED1 homolog rat); adenosine deaminase, RNA-specific, B1 (homolog of rat RED1);
Entrez Gene ID	104
Protein Refseq	NP_001103.1
UniProt ID	P78563
Pathway	C6 deamination of adenosine; Gene Expression; mRNA Editing: A to I Conversion;
Function	RNA binding; adenosine deaminase activity; double-stranded RNA adenosine deaminase activity; double-stranded RNA binding

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