

For Research Use Only

# IMPDH1 Recombinant antibody, PBS Only (Capture)

Catalog Number: 84913-1-PBS



## Basic Information

<b>Catalog Number:</b> 84913-1-PBS	<b>GenBank Accession Number:</b> BC033622	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ug , Concentration: 1 mg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 3614	<b>CloneNo.:</b> 242329D8
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P20839	
<b>Isotype:</b> IgG	<b>Full Name:</b> IMP (inosine monophosphate) dehydrogenase 1	
<b>Immunogen Catalog Number:</b> AG17473	<b>Calculated MW:</b> 563 aa, 60 kDa	
	<b>Observed MW:</b> 53-60 kDa	

## Applications

**Tested Applications:**  
WB, Sandwich ELISA, Indirect ELISA, Sample test

**Species Specificity:**  
human

## Product Information

84913-1-PBS targets IMPDH1 as part of a matched antibody pair:

MP01726-1: 84913-1-PBS capture and 84913-2-PBS detection (validated in Sandwich ELISA)

Unconjugated rabbit recombinant monoclonal antibody in PBS only (BSA and azide free) storage buffer at a concentration of 1 mg/mL, ready for conjugation. Created using Proteintech's proprietary in-house recombinant technology. Recombinant production enables unrivalled batch-to-batch consistency, easy scale-up, and future security of supply.

This conjugation ready format makes antibodies ideal for use in many applications including: ELISAs, multiplex assays requiring matched pairs, mass cytometry, and multiplex imaging applications. Antibody use should be optimized by the end user for each application and assay.

## Background Information

IMPDH1 (Inosine-5'-monophosphate dehydrogenase 1) is also named as IMPD1, IMP dehydrogenase 1 and belongs to the IMPDH/GMPR family. It catalyzes the rate limiting step of de novo guanine synthesis and an important target for the development of drugs with both chemotherapeutic and immunosuppressive activity. It may also have a role in the development of malignancy and the growth progression of some tumors. This protein has some isoforms produced by alternative splicing with the molecular mass of 53-65 kDa.

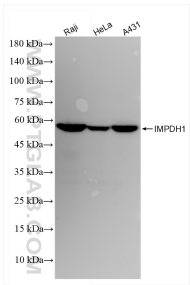
## Storage

**Storage:**  
Store at -80°C.  
**Storage Buffer:**  
PBS Only

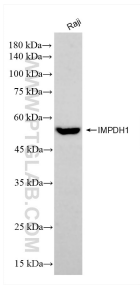
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

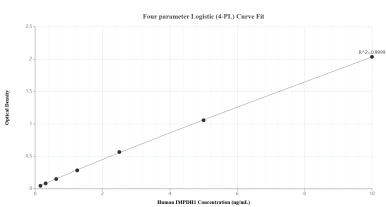
Selected Validation Data



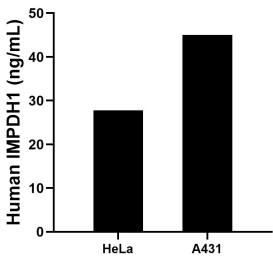
Various lysates were subjected to SDS PAGE followed by western blot with 84913-1-RR (IMPDH1 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 84913-1-PBS in a different storage buffer formulation.



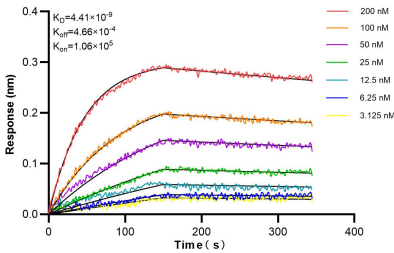
Raji cells were subjected to SDS PAGE followed by western blot with 84913-1-RR (IMPDH1 antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 84913-1-PBS in a different storage buffer formulation.



Sandwich ELISA standard curve of MP01726-1, Human IMPDH1 Recombinant Matched Antibody Pair - PBS only. 84913-1-PBS was coated to a plate as the capture antibody and incubated with serial dilutions of standard Ag17473. 84913-2-PBS was HRP conjugated as the detection antibody. Range: 0.156-10 ng/mL



The mean IMPDH1 concentration was determined to be 27.79 ng/mL in HeLa cell extract based on a 1.00 mg/mL extract load and 45.02 ng/mL in A431 cell extract based on a 1.30 mg/mL extract load.



Biolayer interferometry (BLI) kinetic assays of 84913-1-RR against Human IMPDH1 were performed. The affinity constant is 4.41 nM.