

For Research Use Only

# CLPP Recombinant monoclonal antibody, PBS Only (Capture)

Catalog Number: 87187-3-PBS



## Basic Information

<b>Catalog Number:</b> 87187-3-PBS	<b>GenBank Accession Number:</b> BC002956	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ug , Concentration: 1 mg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 8192	<b>CloneNo.:</b> 252470B7
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> Q16740	
<b>Isotype:</b> IgG	<b>Full Name:</b> ClpP caseinolytic peptidase, ATP-dependent, proteolytic subunit homolog (E. coli)	
<b>Immunogen Catalog Number:</b> AG8325	<b>Calculated MW:</b> 30 kDa	
	<b>Observed MW:</b> 26 kDa	

## Applications

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

**Species Specificity:**  
human, mouse, rat

## Product Information

87187-3-PBS targets CLPP as part of a matched antibody pair:

MP02909-2: 87187-3-PBS capture and 87187-2-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

CLPP is the putative ATP-dependent Clp protease proteolytic subunit and also named as endopeptidase Clp. It belongs to the peptidase S14 family. Clp cleaves peptides in various proteins in a process that requires ATP hydrolysis. It may be responsible for a fairly general and central housekeeping function rather than for the degradation of specific substrates.

## Storage

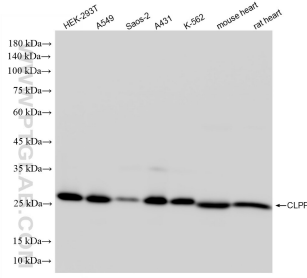
**Storage:**  
Store at -80°C.

**Storage Buffer:**  
PBS only, pH7.3

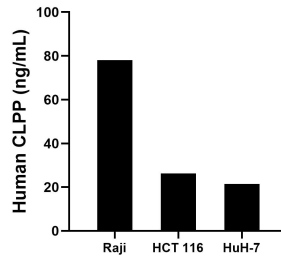
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

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

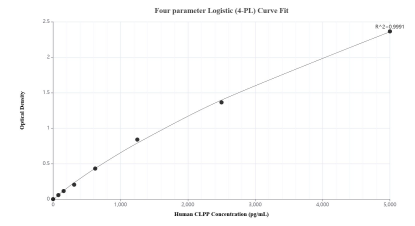
## Selected Validation Data



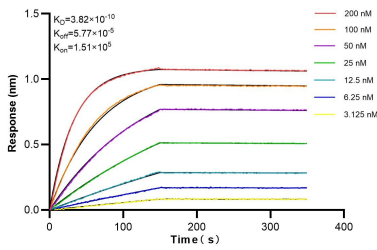
Various lysates were subjected to SDS PAGE followed by western blot with 87187-3-RR (CLPP antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 87187-3-PBS in a different storage buffer formulation.



The mean CLPP concentration was determined to be 78.1 ng/mL in Raji cell extract based on a 1.2 mg/mL extract load, 26.3 ng/mL in HCT 116 cell extract based on a 1.2 mg/mL extract load and 21.4 ng/mL in HuH-7 cell extract based on a 1.2 mg/mL extract load.



Sandwich ELISA standard curve of MP02909-2, Human CLPP Recombinant Matched Antibody Pair - PBS only. 87187-3-PBS was coated to a plate as the capture antibody and incubated with serial dilutions of standard Ag8325. 87187-2-PBS was HRP conjugated as the detection antibody. Range: 78.1-5000 pg/mL.



Biolayer interferometry (BLI) kinetic assays of 87187-3-RR against Human CLPP were performed. The affinity constant is 0.382 nM.