

For Research Use Only

# Mouse Pon3 Recombinant monoclonal antibody, PBS Only (Detector)

Catalog Number: 86577-1-PBS



## Basic Information

Catalog Number:	86577-1-PBS	GenBank Accession Number:	NM_173006.1	Purification Method:	Protein A purification
Concentration:	1 mg/ml	GeneID (NCBI):	269823	CloneNo.:	251535H2
Source:	Rabbit	UNIPROT ID:	Q62087		
Isotype:	IgG	Full Name:	paraoxonase 3		
Immunogen Catalog Number:	EG2743	Calculated MW:	39 kDa		
		Observed MW:	40 kDa		

## Applications

**Tested Applications:**  
WB, Cytometric bead array, Sandwich ELISA, Indirect ELISA

**Species Specificity:**  
mouse, rat

## Background Information

PON3 (paraoxonase 3) is a member of the paraoxonase gene family and shares high homology with PON1 and PON2. The PON3 protein is primarily synthesized by the liver and can bind to high-density lipoprotein (HDL), where it exerts antioxidant functions. PON3 can prevent the oxidation of low-density lipoprotein (LDL) and disrupt bacterial quorum-sensing molecules. Additionally, PON3 is expressed in mouse models of Alzheimer's disease (AD), with positive staining for PON3 detected in astrocytes surrounding A $\beta$  plaques. These findings suggest that PON3 plays an important role in antioxidant stress and lipid peroxidation and may have potential protective effects on pathological processes such as neurodegenerative diseases and atherosclerosis.

## Storage

**Storage:**  
Store at -80°C.  
**The product is shipped with ice packs. Upon receipt, store it immediately at -80°C**

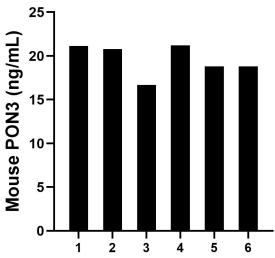
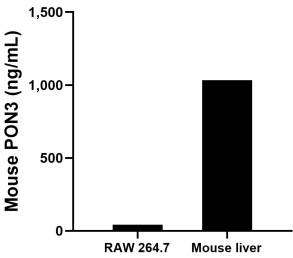
**Storage Buffer:**  
PBS only, pH7.3

For technical support and original validation data for this product please contact:  
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

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

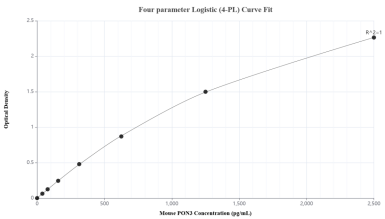
Selected Validation Data

Various lysates were subjected to SDS PAGE followed by western blot with 86577-1-RR (Pon3 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 86577-1-PBS in a different storage buffer formulation.

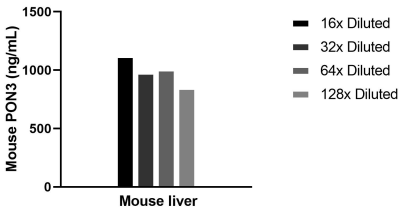


The mean PON3 concentration was determined to be 41.6 ng/mL in RAW 264.7 cell extract based on a 1.3 mg/mL extract load and 1,033.8 ng/mL in mouse liver tissue extract based on a 8.4 mg/mL extract load.

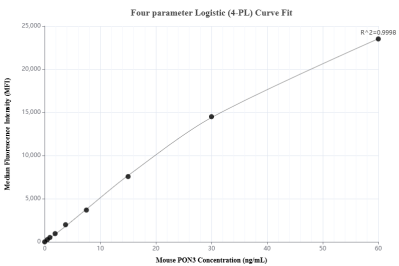
Serum of six mice was measured. The PON3 concentration of detected samples was determined to be 19.6 ng/mL with a range of 16.7-21.2 ng/mL



Sandwich ELISA standard curve of MP02543-1, Mouse PON3 Recombinant Matched Antibody Pair - PBS only. 86577-2-PBS was coated to a plate as the capture antibody and incubated with serial dilutions of standard Eg2743. 86577-1-PBS was HRP conjugated as the detection antibody. Range: 39.1-2500 pg/mL



The mean PON3 concentration was determined to be 986.3 ng/mL in Mouse liver tissue extract based on a 8.4 mg/mL extract load.



Cytometric bead array standard curve of MP02543-1, MOUSE PON3 Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 86577-2-PBS. Detection antibody: 86577-1-PBS. Standard: Eg2743. Range: 0.469-60 ng/mL