

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
Size:	100ug, Concentration: 1 mg/ml by Nanodrop;	GenID (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

<b>Tested Applications:</b>
WB, Cytometric bead array, Sandwich ELISA, Indirect ELISA
<b>Species Specificity:</b>

86577-1-PBS targets Pon3 as part of a matched antibody pair:

MP02543-1: 86577-2-PBS capture and 86577-1-PBS detection (validated in Cytometric bead array, 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

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

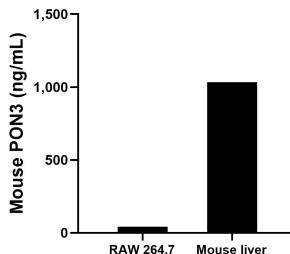
For technical support and original validation data for this product please contact:  
T: 1(888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

E: proteintech@ptglab.com  
W: ptglab.com

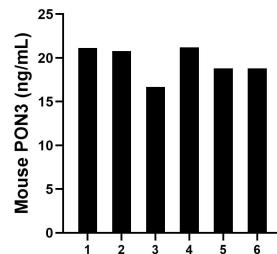
This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

## Selected Validation Data

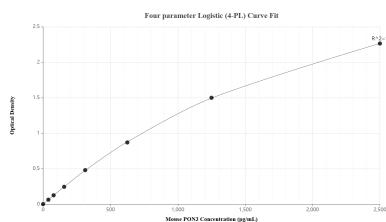
Various lysates were subjected to SDS PAGE followed by western blot with 86577-1-RR (Pon3 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 86577-1-PBS in a different storage buffer formulation.



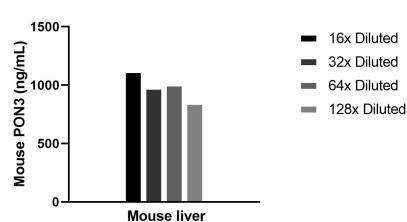
The mean PON3 concentration was determined to be 41.6 ng/mL in RAW 264.7 cell extract based on a 1.3 mg/mL extract load and 1,033.8 ng/mL in mouse liver tissue extract based on a 8.4 mg/mL extract load.



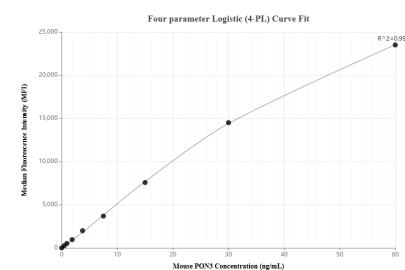
Serum of six mice was measured. The PON3 concentration of detected samples was determined to be 19.6 ng/mL with a range of 16.7-21.2 ng/mL.



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.