

For Research Use Only

# Mouse CD14 Recombinant antibody, PBS Only (Capture)

Catalog Number: 83297-7-PBS



## Basic Information

<b>Catalog Number:</b> 83297-7-PBS	<b>GenBank Accession Number:</b> NM_009841.4	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ug, Concentration: 1 mg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 12475	<b>CloneNo.:</b> 240225F2
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P10810	
<b>Isotype:</b> IgG	<b>Full Name:</b> CD14 antigen	
	<b>Calculated MW:</b> 39 kDa	

## Applications

**Tested Applications:**  
IF/ICC, Sandwich ELISA, Indirect ELISA, Sample test

**Species Specificity:**  
mouse

## Product Information

83297-7-PBS targets CD14 as part of a matched antibody pair:

MP00313-4: 83297-7-PBS capture and 83297-1-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

CD14 is a 50-55 kDa glycosylphosphatidylinositol-anchored glycoprotein preferentially expressed on monocytes and macrophages, and at lower levels on granulocytes (PMID: 3385210; 2462937; 7685797). CD14 can also exist as a soluble protein. CD14 acts as a co-receptor for bacterial liposaccharides (LPS) (PMID: 1698311). It plays a major role in the inflammatory response of monocytes to LPS.

## Storage

**Storage:**  
Store at -80°C.

**Storage Buffer:**  
PBS Only

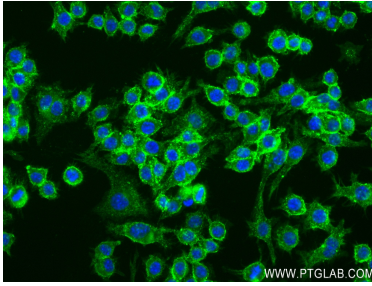
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free  
in USA), or 1(312) 455-8498 (outside USA)

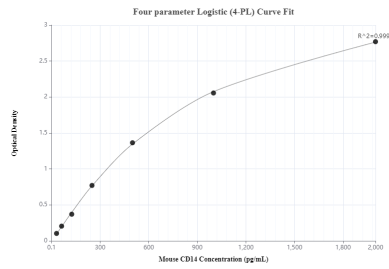
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

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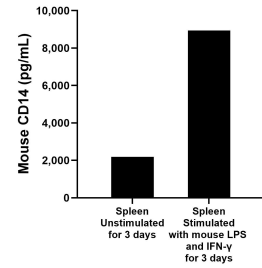
## Selected Validation Data



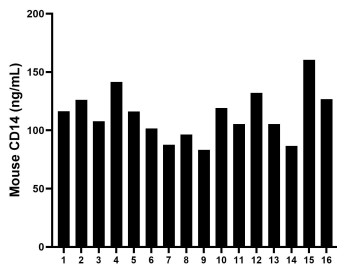
Immunofluorescent analysis of (4% PFA) fixed RAW 264.7 cells using CD14 antibody (83297-7-RR, Clone: 240225F2) at dilution of 1:250 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2). This data was developed using the same antibody clone with 83297-7-PBS in a different storage buffer formulation.



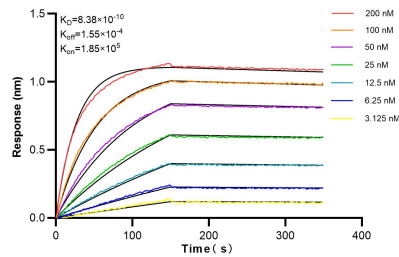
Sandwich ELISA standard curve of MP00313-4, Mouse CD14 Monoclonal Matched Antibody Pair - PBS only. 83297-7-PBS was coated to a plate as the capture antibody and incubated with serial dilutions of standard Eg0847. 83297-1-PBS was HRP conjugated as the detection antibody. Range: 31.25-2000 pg/mL



Mouse splenocytes ( $1 \times 10^6$  cells/mL) were cultured for 3 days in RPMI supplemented with 10% fetal calf serum, 100 ng/mL of recombinant mouse IFN- $\gamma$  and 1  $\mu$ g/mL of LPS. The mean CD-14 concentration was determined to be 2,187.4 pg/mL in unstimulated spleen, 8,939.2 pg/mL in IFN- $\gamma$  and LPS stimulated spleen supernatant.



Serum of sixteen mice was measured. The CD14 concentration of detected samples was determined to be 113.29 ng/mL with a range of 83.24-160.50 ng/mL.



Biolayer interferometry (BLI) kinetic assays of 83297-7-RR against Mouse CD14 were performed. The affinity constant is 0.838 nM.