

For Research Use Only

# Mouse Lipocalin-2/NGAL Recombinant antibody, PBS Only (Capture)

Catalog Number: 83102-1-PBS



## Basic Information

<b>Catalog Number:</b> 83102-1-PBS	<b>GenBank Accession Number:</b> NM_008491.1	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ug, Concentration: 1mg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 16819	<b>CloneNo.:</b> 230372D6
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P11672	
<b>Isotype:</b> IgG	<b>Full Name:</b> lipocalin 2	
	<b>Calculated MW:</b> 23KD	
	<b>Observed MW:</b> 25 kDa	

## Applications

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

**Species Specificity:**  
mouse

## Product Information

83102-1-PBS targets Lipocalin-2/NGAL as part of a matched antibody pair:

MP00302-4: 83102-1-PBS capture and 83102-5-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

Neutrophil gelatinase-associated lipocalin (NGAL, also known as lipocalin-2, siderocalin, or LCN2) is a small molecule of almost 25 kDa that belongs to the well-defined superfamily of proteins called lipocalins. NGAL was initially found in activated neutrophils, under its role as an innate antibacterial factor. However, it subsequently was shown that many other types of cells, including in the kidney tubule, may produce NGAL in response to various injuries. NGAL may become one of the most promising next-generation biomarkers in clinical nephrology and beyond. This antibody recognizes mouse Lipocalin-2/NGAL.

## Storage

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

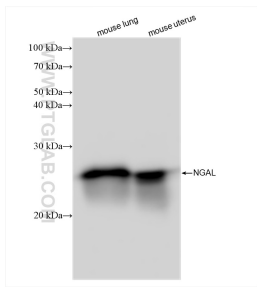
For technical support and original validation data for this product please contact:

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

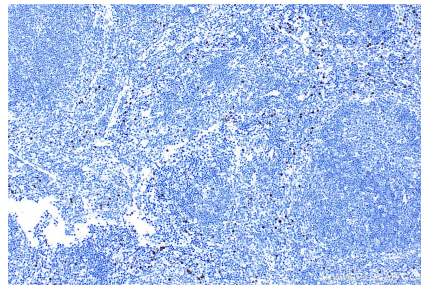
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

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

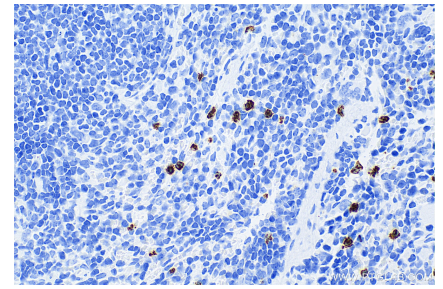
## Selected Validation Data



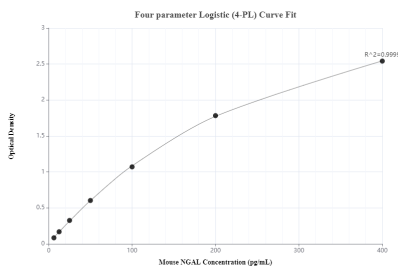
Various lysates were subjected to SDS PAGE followed by western blot with 83102-1-RR (Lipocalin-2/NGAL antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 83102-1-PBS in a different storage buffer formulation.



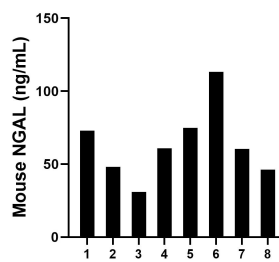
Immunohistochemical analysis of paraffin-embedded mouse spleen tissue slide using 83102-1-RR (Lipocalin-2/NGAL antibody) at dilution of 1:400 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 83102-1-PBS in a different storage buffer formulation.



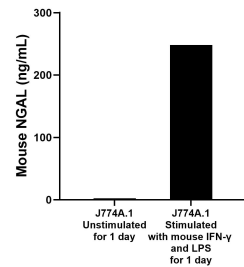
Immunohistochemical analysis of paraffin-embedded mouse spleen tissue slide using 83102-1-RR (Lipocalin-2/NGAL antibody) at dilution of 1:400 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 83102-1-PBS in a different storage buffer formulation.



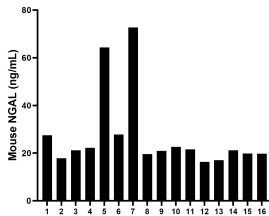
Sandwich ELISA standard curve of MP00302-4, Mouse NGAL Monoclonal Matched Antibody Pair - PBS only. 83102-1-PBS was coated to a plate as the capture antibody and incubated with serial dilutions of standard Eg0572. 83102-5-PBS was HRP conjugated as the detection antibody. Range: 6.25-400 pg/mL



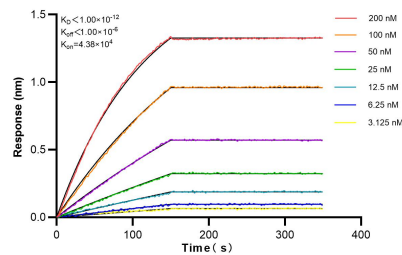
Urine of eight mice were measured. The NGAL concentration of detected samples was determined to be 63.5 ng/mL with a range of 31.0 - 113.3 ng/mL



Mouse reticulum cell sarcoma macrophage cells ( $0.5 \times 10^6$  cells/mL) were cultured for 1 day in DMEM supplemented with 10% fetal bovine serum containing 20 ng/mL of recombinant mouse IFN- $\gamma$  and 1  $\mu$ g/mL of lipopolysaccharide. The mean NGAL concentration was determined to be 2.3 ng/mL in unstimulated J774A.1 supernatant, 248.3 ng/mL in stimulated J774A.1 supernatant.



Serum of sixteen mice were measured. The NGAL concentration of detected samples was determined to be 27.0 ng/mL with a range of 16.3 - 72.7 ng/mL



Biolayer interferometry (BLI) kinetic assays of 83102-1-RR against Mouse Lipocalin-2/Ngal were performed. The affinity constant is below 1 pM.