For Research Use Only

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



Purification Method:

Protein A purification

CloneNo.:

230372D6

Catalog Number:83102-1-PBS

Basic Information

Catalog Number:

83102-1-PBS

Size: 1mg/ml Source:

Rabbit Isotype: IgG GenBank Accession Number:

NM_008491.1 GeneID (NCBI): 16819 UNIPROT ID:

P11672 Full Name: lipocalin 2

Calculated MW: 23KD

Observed MW:

25 kDa

Applications

Tested Applications:

WB, IHC, Sandwich ELISA, Indirect ELISA, Sample test

Species Specificity:

mouse

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 Ngal.

Storage

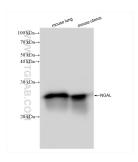
Storage:

Store at -80°C.

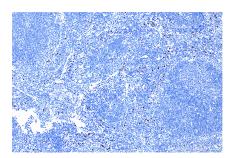
The product is shipped with ice packs. Upon receipt, store it immediately at -80°C $\,$

Storage Buffer: PBS Only

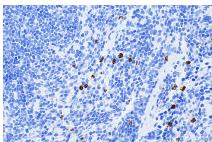
Selected Validation Data



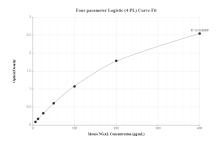
Various lysates were subjected to SDS PAGE followed by western blot with 83102-1-RR (Lipocalin-2/Ngal antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 83102-1-PBS in a different storage buffer formulation.



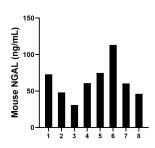
Immunohistochemical analysis of paraffinembedded mouse spleen tissue slide using 83102-1-RR (Lipocalin-2/Ngal antibody) at dilution of 1:400 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 83102-1-PBS in a different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



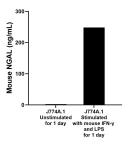
Immunohistochemical analysis of paraffinembedded mouse spleen tissue slide using 83102-1-RR (Lipocalin-2/Ngal antibody) at dilution of 1:400 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 83102-1-PBS in a different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



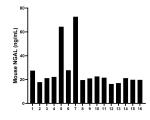
Sandwich ELISA standard curve of MP00302-4, Mouse NGAL Monoclonal Matched Antibody Pair - PBS only. 83102-1-PBS was coated to a plate as the capture antibody and incubated with serial dilutions of standard Eg0572. 83102-5-PBS was HRP conjugated as the detection antibody. Range: 6.25-400 pg/mL



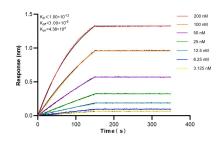
Urine of eight mice were measured. The NGAL concentration of detected samples was determined to be 63.5 ng/mL with a range of 31.0 - 113.3 ng/mL



Mouse reticulum cell sarcoma macrophage cells (0.5 x 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- γ and 1 μ 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 (BLL) kinetic assays of 83102-1-RR against Mouse Lipocalin-2/Ngal were performed. The affinity constant is below 1 pM.