

For Research Use Only

# Mesothelin Recombinant antibody, PBS Only (Detector)

Catalog Number: 83744-2-PBS



## Basic Information

<b>Catalog Number:</b> 83744-2-PBS	<b>GenBank Accession Number:</b> NM_005823	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ug, Concentration: 1 mg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 10232	<b>CloneNo.:</b> 240795G5
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> Q13421	
<b>Isotype:</b> IgG	<b>Full Name:</b> mesothelin	
	<b>Calculated MW:</b> 69KD	
	<b>Observed MW:</b> 69 kDa, 40 kDa	

## Applications

**Tested Applications:**  
WB, IF/ICC, Cytometric bead array, Sandwich ELISA, Indirect ELISA, Sample test

**Species Specificity:**  
human

## Product Information

83744-2-PBS targets Mesothelin as part of a matched antibody pair:

MP00697-2: 83744-5-PBS capture and 83744-2-PBS detection (validated in Cytometric bead array, Sandwich ELISA)

MP00697-3: 83744-3-PBS capture and 83744-2-PBS detection (validated in Cytometric bead array)

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

Mesothelin (MSLN) is a 40kDa GPI-anchored surface glycoprotein that is expressed on pleural and peritoneal mesothelial cells, but not in other non-neoplastic tissues. The mesothelin gene encodes a 69-71kDa precursor protein that is processed to a 40kDa membrane-bound protein termed mesothelin and a 31kDa shed fragment called megakaryocyte-potentiating factor (MPF) that is released from the cell. Mesothelin is a tumor differentiation antigen present at low levels on a restricted set of normal adult tissues (e.g. mesothelium), and is expressed at high levels in mesotheliomas, as well as ovarian, pancreatic, and lung cancers. Mesothelin may be a new target for immunotherapy (PMID: 20922056, 18691948, 15217923).

## Storage

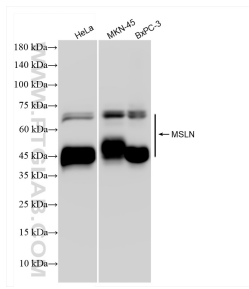
**Storage:**  
Store at -80°C.

**Storage Buffer:**  
PBS Only

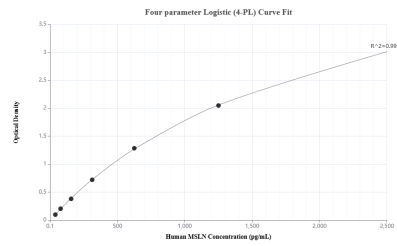
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

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

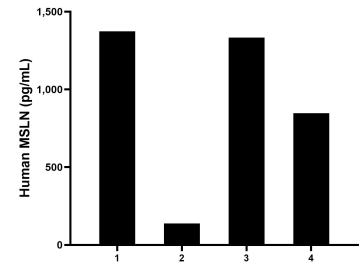
## Selected Validation Data



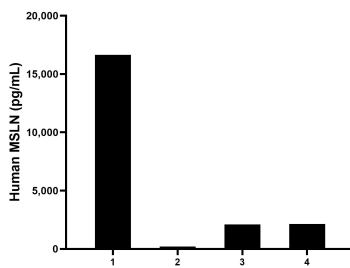
Various lysates were subjected to SDS PAGE followed by western blot with 83744-2-RR (MSLN antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 83744-2-PBS in a different storage buffer formulation.



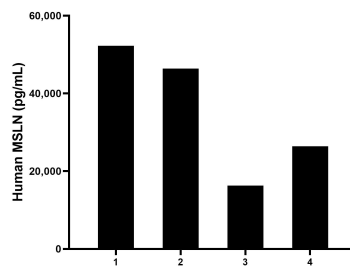
Sandwich ELISA standard curve of MP00697-2, Human MSLN Recombinant Matched Antibody Pair - PBS only. 83744-5-PBS was coated to a plate as the capture antibody and incubated with serial dilutions of standard Eg31658. 83744-2-PBS was HRP conjugated as the detection antibody. Range: 39.1-2500 pg/mL



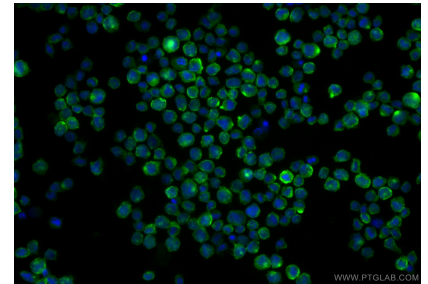
Urine of four humans was measured. The human MSLN concentration of detected samples was determined to be 923.5 pg/mL with a range of 137.8 - 1,373.8 pg/mL



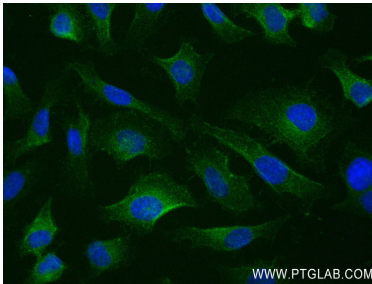
Saliva of four humans was measured. The human MSLN concentration of detected samples was determined to be 5,273.4 pg/mL with a range of 209.0 - 16,634.9 pg/mL



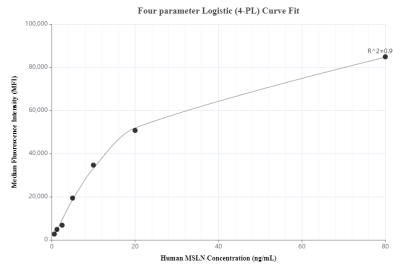
Serum of four humans was measured. The human MSLN concentration of detected samples was determined to be 35,341.8 pg/mL with a range of 16,291.9 - 52,246.0 pg/mL



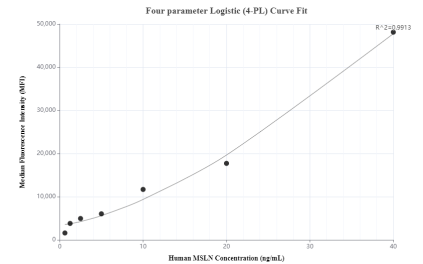
Immunofluorescent analysis of (4% PFA) fixed THP-1 cells using MSLN antibody (83744-2-RR, Clone: 240795G5) at dilution of 1:500 and CoraLite@488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). This data was developed using the same antibody clone with 83744-2-PBS in a different storage buffer formulation.



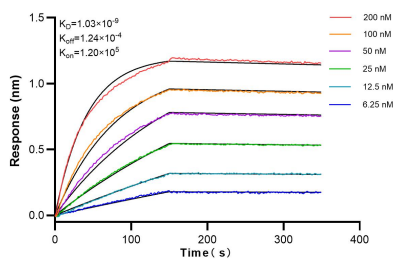
Immunofluorescent analysis of (-20°C Ethanol) fixed HeLa cells using MSLN antibody (83744-2-RR, Clone: 240795G5) at dilution of 1:200 and CoraLite@488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2). This data was developed using the same antibody clone with 83744-2-PBS in a different storage buffer formulation.



Cytometric bead array standard curve of MP00697-2, MSLN Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 83744-5-PBS. Detection antibody: 83744-2-PBS. Standard: Eg31658. Range: 0.625-80 ng/mL



Cytometric bead array standard curve of MP00697-3, MSLN Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 83744-3-PBS. Detection antibody: 83744-2-PBS. Standard: Eg31658. Range: 0.625-40 ng/mL



Biolayer interferometry (BLI) kinetic assays of 83744-2-RR against Human MSLN were performed. The affinity constant is 1.03 nM.