

For Research Use Only

Mesothelin Recombinant antibody, PBS Only (Detector)

Catalog Number: 83744-2-PBS



Basic Information

Catalog Number:

83744-2-PBS

Size:

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

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

EG31658

GenBank Accession Number:

NM_005823

GeneID (NCBI):

10232

UNIPROT ID:

Q13421

Full Name:

mesothelin

Calculated MW:

69KD

Observed MW:

69 kDa, 40 kDa

Purification Method:

Protein A purification

CloneNo.:

240795G5

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, pH7.3

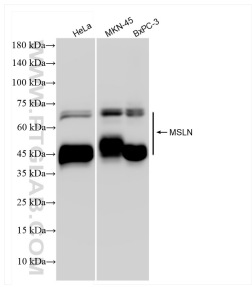
For technical support and original validation data for this product please contact:

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

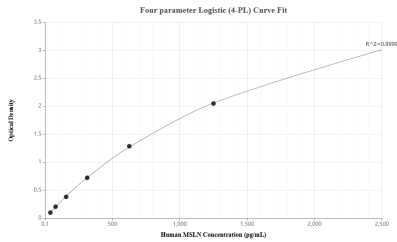
E: proteintech@ptglab.com
W: ptglab.com

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

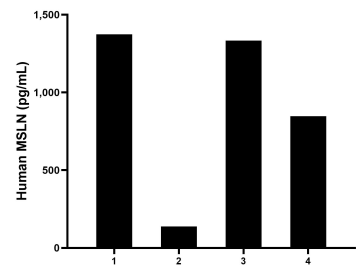
Selected Validation Data



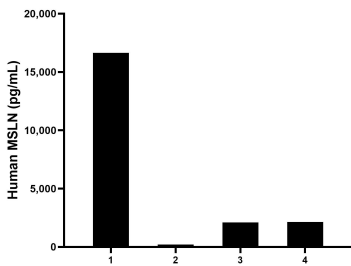
Various lysates were subjected to SDS PAGE followed by western blot with 83744-2-RR (MSLN antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 83744-2-PBS in a different storage buffer formulation.



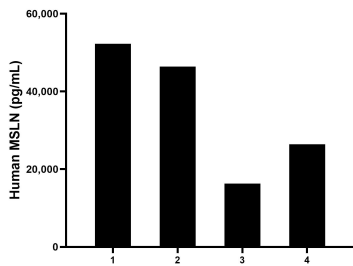
Sandwich ELISA standard curve of MP00697-2, Human MSLN/Mesothelin Recombinant Matched Antibody Pair - PBS only. 83744-5-PBS was coated to a plate as the capture antibody and incubated with serial dilutions of standard Eg31658. 83744-2-PBS was HRP conjugated as the detection antibody. Range: 39.1-2500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



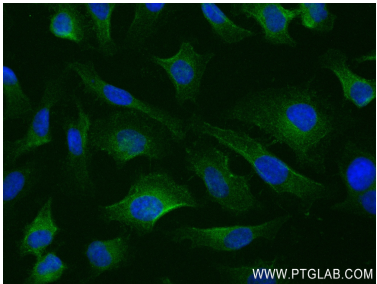
Urine of four humans was measured. The human MSLN/Mesothelin concentration of detected samples was determined to be 923.5 pg/mL with a range of 138.7 - 1,373.8 pg/mL.



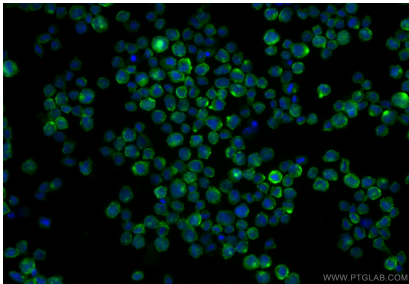
Saliva of four humans was measured. The human MSLN/Mesothelin concentration of detected samples was determined to be 5,273.4 pg/mL with a range of 209.0 - 16,634.9 pg/mL



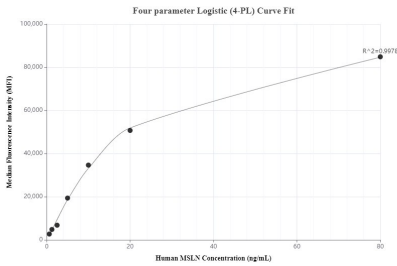
Serum of four humans was measured. The human MSLN/Mesothelin concentration of detected samples was determined to be 35,341.8 pg/mL with a range of 16,291.9 - 52,246.0 pg/mL



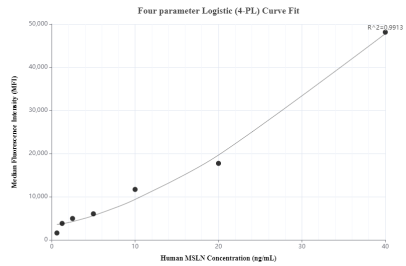
Immunofluorescent analysis of (-20°C Ethanol) fixed HeLa cells using MSLN antibody (83744-2-RR, Clone: 240795G5) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2). This data was developed using the same antibody clone with 83744-2-PBS in a different storage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



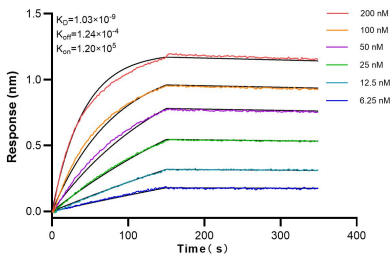
Immunofluorescent analysis of (4% PFA) fixed THP-1 cells using MSLN antibody (83744-2-RR, Clone: 240795G5) at dilution of 1:500 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). This data was developed using the same antibody clone with 83744-2-PBS in a different storage buffer formulation.



Cytometric bead array standard curve of MP00697-2, MSLN/Mesothelin 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/Mesothelin 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.