

For Research Use Only

# nectin 4 Recombinant antibody, PBS Only (Capture)

Catalog Number:83223-1-PBS



## Basic Information

<b>Catalog Number:</b> 83223-1-PBS	<b>GenBank Accession Number:</b> BC010423	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ug , Concentration: 1 mg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 81607	<b>CloneNo.:</b> 240009E4
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> Q96NY8	<b>Affinity:</b> $K_D = 8.49 \times 10^{-10}M$
<b>Isotype:</b> IgG	<b>Full Name:</b> poliovirus receptor-related 4	$K_{off} = 2.20 \times 10^{-4}M$ $K_{on} = 2.59 \times 10^5M$
	<b>Calculated MW:</b> 510 aa, 55 kDa	

## Applications

**Tested Applications:**  
Cytometric bead array, Sandwich ELISA, Indirect ELISA, Sample test

**Species Specificity:**  
human

## Product Information

83223-1-PBS targets nectin 4 as part of a matched antibody pair:

MP00147-1: 83223-1-PBS capture and 83223-4-PBS detection (validated in Cytometric bead array)

MP00147-2: 83223-1-PBS capture and 83223-3-PBS detection (validated in Cytometric bead array)

MP00147-4: 83223-1-PBS capture and 83223-7-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

Nectin-4, also known as PVRL4, is a type-I transmembrane glycoprotein that belongs to the nectin subfamily of immunoglobulin-like adhesion molecules that participate in Ca(2+)-independent cell-cell adhesion (PMID: 18703497). The extracellular domain of Nectin-4, which contains three immunoglobulin-like domains (V and two C2-type domains, VCC), can be proteolytically cleaved to release a soluble form. Nectin-4 interacts with afadin via its carboxyl-terminal cytoplasmic sequence and trans-interacts with nectin-1/PRR1 through V domain interaction (PMID: 11544254). It acts as a receptor for measles virus (PMID: 22048310). Nectin-4 is overexpressed in multiple human malignancies and the aberrant expression is correlated with cancer progression and poor prognostic (PMID: 35131876). Nectin-4 can be detected as a soluble form of 43 kDa and a transmembrane form of 66 kDa (PMID: 15784625).

## Storage

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

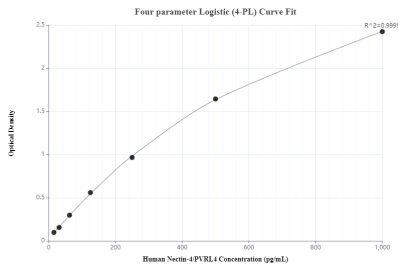
For technical support and original validation data for this product please contact:

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

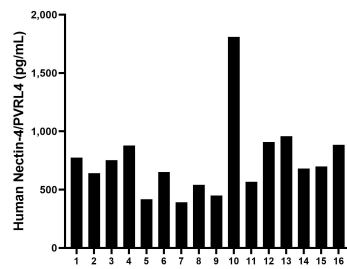
E: proteintech@ptglab.com  
W: ptglab.com

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

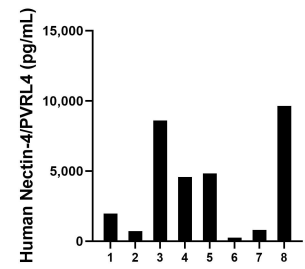
## Selected Validation Data



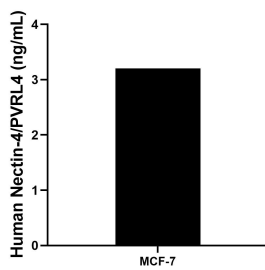
Sandwich ELISA standard curve of MP00147-4, Human Nectin-4/PVRL4 Recombinant Matched Antibody Pair - PBS only. 83223-1-PBS was coated to a plate as the capture antibody and incubated with serial dilutions of standard Eg0415. 83223-7-PBS was HRP conjugated as the detection antibody. Range: 15.6-1000 pg/ml.



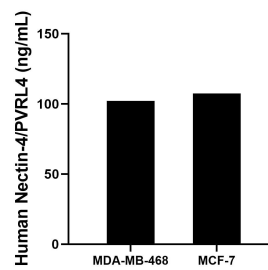
Serum of sixteen individual healthy human donors was measured. The Nectin-4/PVRL4 concentration of detected samples was determined to be 750.17 pg/mL with a range of 392.48 - 1,810.23 pg/mL.



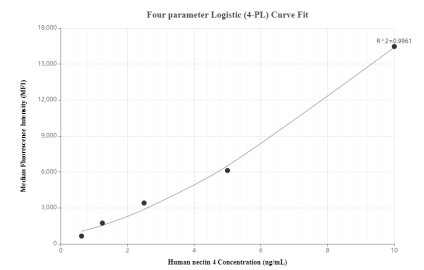
Urine of eight individual healthy human donors was measured. The Nectin-4/PVRL4 concentration of detected samples was determined to be 3,920.62 pg/mL with a range of 249.12 - 9,633.39 pg/mL.



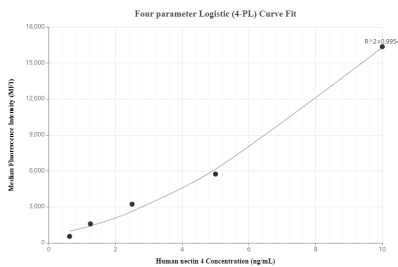
MCF-7 human breast cancer cells ( $5 \times 10^6$  cells/mL) were cultured in DMEM and 10% fetal bovine serum, 4 mM L-glutamine, 4500 mg/L glucose, 100 U/mL penicillin, and 100 µg/mL streptomycin sulfate.  $1 \times 10^6$  cells/mL were lysated by RIPA buffer, and the supernate was assayed and measured 3.2 ng/mL.



The mean Nectin-4/PVRL4 concentration was determined to be 102.1 ng/mL in MDA-MB-468 cell extract based on a 3.1 mg/mL extract load and 107.4 ng/mL in MCF-7 cell extract based on a 4.2 mg/mL extract load.



Cytometric bead array standard curve of MP00147-1, Nectin-4/PVRL4 Recombinant Matched Antibody Pair - PBS only. Capture antibody: 83223-1-PBS. Detection antibody: 83223-4-PBS. Standard: Eg0415. Range: 0.625-10 ng/mL.



Cytometric bead array standard curve of MP00147-2, Nectin-4/PVRL4 Recombinant Matched Antibody Pair - PBS only. Capture antibody: 83223-1-PBS. Detection antibody: 83223-3-PBS. Standard: Eg0415. Range: 0.625-10 ng/mL.