

For Research Use Only

# NAP1;NCKAP1 Recombinant antibody, PBS Only (Detector)

Catalog Number: 85142-2-PBS



## Basic Information

<b>Catalog Number:</b> 85142-2-PBS	<b>GenBank Accession Number:</b> BC015025	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ug, Concentration: 1 mg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 10787	<b>CloneNo.:</b> 242784C5
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> Q9Y2A7	
<b>Isotype:</b> IgG	<b>Full Name:</b> NCK-associated protein 1	
<b>Immunogen Catalog Number:</b> AG2788	<b>Calculated MW:</b> 129 kDa	
	<b>Observed MW:</b> 115-125 kDa	

## Applications

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

**Species Specificity:**  
human, mouse, rat

## Product Information

85142-2-PBS targets NAP1;NCKAP1 as part of a matched antibody pair:

MP01841-1: 85142-1-PBS capture and 85142-2-PBS detection (validated in Cytometric bead array)

MP01841-2: 85142-3-PBS capture and 85142-2-PBS detection (validated in Cytometric bead array, 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

NCK-associated protein 1 (NCKAP1), also known as NAP1 or HEM2, is encoded by an apoptosis-related gene human NAP1, the expression of which is strongly down-regulated in sporadic Alzheimer's disease (AD). Human NAP1 is predominantly expressed in neuronal cells. Antisense oligo DNA of human NAP1 transcripts was found to induce apoptosis of neuronal cells. Loss of NAP1 function disrupts neuronal differentiation. Likewise, NAP1 plays an essential role in facilitating neuronal cytoskeletal changes underlying the postmigratory differentiation of cortical neurons, a critical step in functional wiring of the cortex. Human NAP1 is also proved to be an orthologue of rat Nap1 which binds to the adaptor molecule NCK in signal transduction.

## Storage

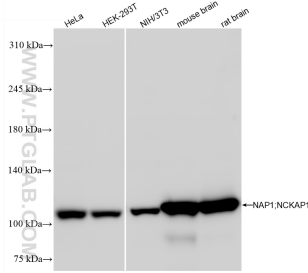
**Storage:**  
Store at -80°C.

**Storage Buffer:**  
PBS Only

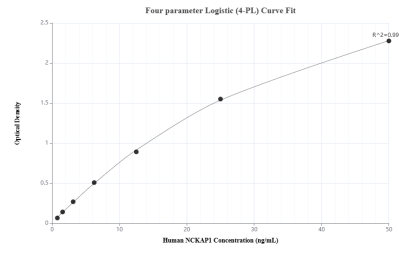
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

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

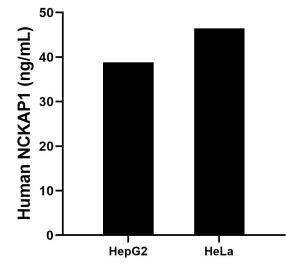
## Selected Validation Data



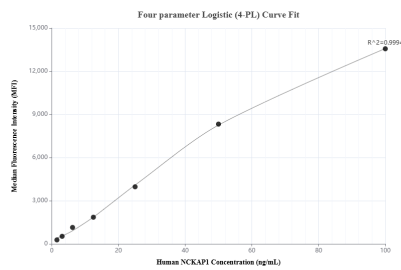
Various lysates were subjected to SDS PAGE followed by western blot with 85142-2-RR (NAP1;NCKAP1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 85142-2-PBS in a different storage buffer formulation.



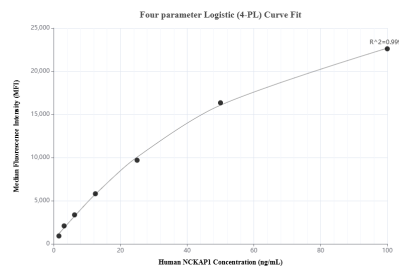
Sandwich ELISA standard curve of MP01841-2, Humanc NCKAP1 Recombinant Matched Antibody Pair - PBS only. 85142-3-PBS was coated to a plate as the capture antibody and incubated with serial dilutions of standard Ag2788. 85142-2-PBS was HRP conjugated as the detection antibody. Range: 0.781-50 ng/mL



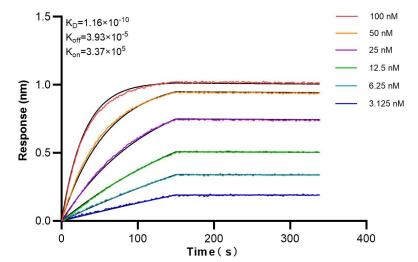
The mean NCKAP1 concentration was determined to be 38.80 ng/mL in HepG2 cell extract based on a 1.0 mg/mL extract load and 46.44 ng/mL in HeLa cell extract based on a 1.5 mg/mL extract load.



Cytometric bead array standard curve of MP01841-2, NCKAP1 Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 85142-3-PBS. Detection antibody: 85142-2-PBS. Standard: Ag2788. Range: 1.563-100 ng/mL



Cytometric bead array standard curve of MP01841-1, NCKAP1 Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 85142-1-PBS. Detection antibody: 85142-2-PBS. Standard: Ag2788. Range: 1.563-100 ng/mL



Bi-layer interferometry (BLI) kinetic assays of 85142-2-RR against Human NAP1;NCKAP1 were performed. The affinity constant is 0.116 nM.