

For Research Use Only

# Coilin Recombinant monoclonal antibody, PBS Only (Detector)

Catalog Number: 87171-1-PBS



## Basic Information

<b>Catalog Number:</b> 87171-1-PBS	<b>GenBank Accession Number:</b> BC010385	<b>Purification Method:</b> Protein A purification
<b>Source:</b> Rabbit	<b>GeneID (NCBI):</b> 8161	<b>CloneNo.:</b> 252327B11
<b>Isotype:</b> IgG	<b>UNIPROT ID:</b> P38432	
<b>Immunogen Catalog Number:</b> AG1416	<b>Full Name:</b> coilin	
	<b>Calculated MW:</b> 576 aa, 63 kDa	
	<b>Observed MW:</b> 75 kDa	

## Applications

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

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

## Background Information

The nuclear coiled body (CBs) and nuclear structures known as gems contain high concentrations of the survival motor neurons (SMN) protein complex. CBs and gems often colocalize, and communication between them is mediated by COIL. COIL is a component of the CBS which are involved in the function or assembly/disassembly of nucleoplasmic snRNPs. During mitosis, CBs disassemble, coinciding with a mitotic-specific phosphorylation of p80 coilin, and symmetrical dimethylation of the COIL RG box motif is a molecular switch that determines whether the SMN complex forms gems or becomes incorporated into CBs.

## 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, pH7.3

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

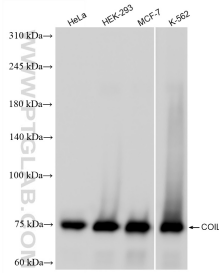
T: 4006900926

E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

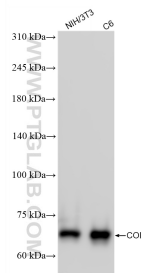
W: [ptgcn.com](http://ptgcn.com)

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

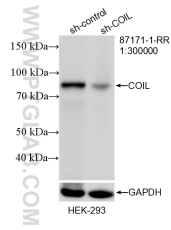
## Selected Validation Data



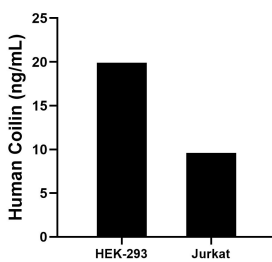
Various lysates were subjected to SDS PAGE followed by western blot with 87171-1-RR (COIL antibody) at dilution of 1:40000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 87171-1-PBS in a different storage buffer formulation.



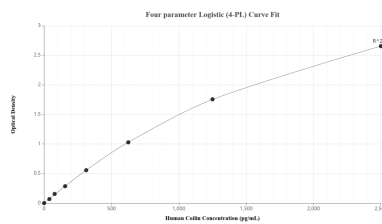
Various lysates were subjected to SDS PAGE followed by western blot with 87171-1-RR (COIL antibody) at dilution of 1:40000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 87171-1-PBS in a different storage buffer formulation.



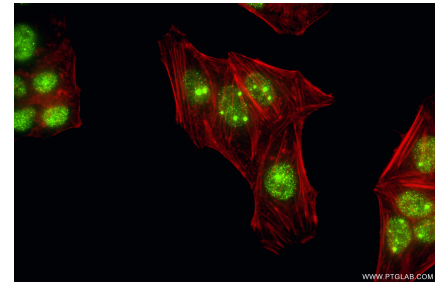
WB result of Coilin antibody (87171-1-RR; 1:300000; incubated at room temperature for 1.5 hours) with sh-Control and sh-Coilin transfected HEK-293 cells. This data was developed using the same antibody clone with 87171-1-PBS in a different storage buffer formulation.



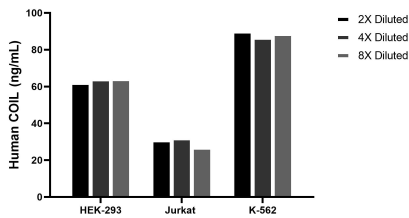
The mean Coilin concentration was determined to be 19.9 ng/mL in HEK-293 cell extract based on a 1.2 mg/mL extract load and 9.6 ng/mL in Jurkat cell extract based on a 1.2 mg/mL extract load.



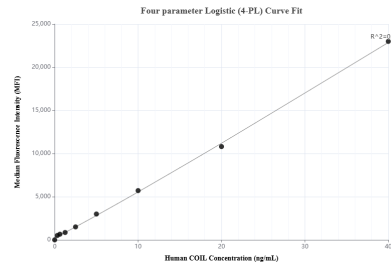
Sandwich ELISA standard curve of MP02891-1, Human Coilin Recombinant Matched Antibody Pair - PBS only. 87171-2-PBS was coated to a plate as the capture antibody and incubated with serial dilutions of standard Ag1416. 87171-1-PBS was HRP conjugated as the detection antibody. Range: 39.1-2500 pg/mL.



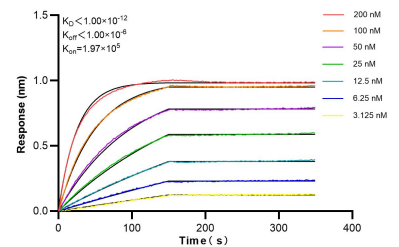
Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using COIL antibody (87171-1-RR, Clone: 252327B11) at dilution of 1:1000 and CoraLite@488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red). This data was developed using the same antibody clone with 87171-1-PBS in a different storage buffer formulation.



The mean COIL/Coilin concentration was determined to be 63.3 ng/mL in HEK-293 cell extract based on a 1.2 mg/mL extract load, 29.8 ng/mL in Jurkat cell extract based on a 1.2 mg/mL extract load, 88.3 ng/mL in K-562 cell extract based on a 1.2 mg/mL extract load.



Cytometric bead array standard curve of MP02891-1, COIL/Coilin Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 87171-2-PBS. Detection antibody: 87171-1-PBS. Standard: Ag1416. Range: 0.312-40 ng/mL.



Bi-layer interferometry (BLI) kinetic assays of 87171-1-RR against Human Coilin were performed. The affinity constant is below 1 pM.