

For Research Use Only

Coilin Recombinant monoclonal antibody, PBS Only (Detector)

Catalog Number: 87171-1-PBS



Basic Information

Catalog Number: 87171-1-PBS	GenBank Accession Number: BC010385	Purification Method: Protein A purification
Size: 100ug, Concentration: 1 mg/ml by Nanodrop;	GeneID (NCBI): 8161	CloneNo.: 252327B11
Source: Rabbit	UNIPROT ID: P38432	
Isotype: IgG	Full Name: coilin	
Immunogen Catalog Number: AG1416	Calculated MW: 576 aa, 63 kDa	
	Observed MW: 75 kDa	

Applications

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

Species Specificity:
human, mouse, rat

Product Information

87171-1-PBS targets Coilin as part of a matched antibody pair:

MP02891-1: 87171-2-PBS capture and 87171-1-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

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

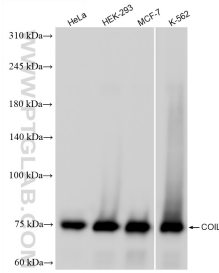
Storage:
Store at -80°C.

Storage Buffer:
PBS only, pH7.3

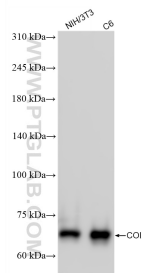
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA) E: proteintech@ptglab.com W: ptglab.com

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

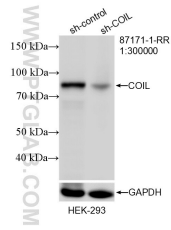
Selected Validation Data



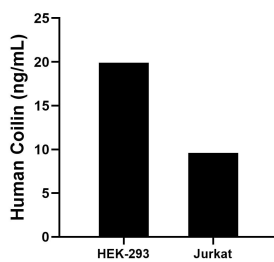
Various lysates were subjected to SDS PAGE followed by western blot with 87171-1-RR (COIL antibody) at dilution of 1:40000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 87171-1-PBS in a different storage buffer formulation.



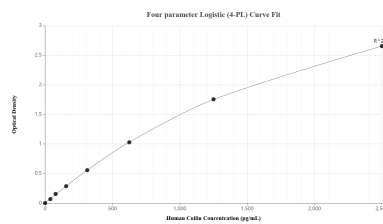
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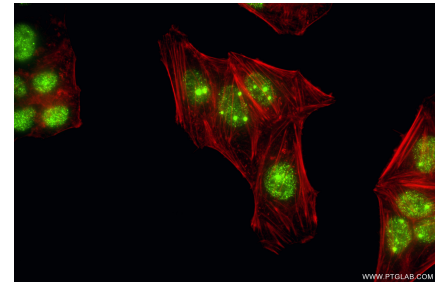
WB result of Coilin antibody (87171-1-RR; 1:300000; incubated at room temperature for 1.5 hours) with sh-Control and sh-Coilin transfected HEK-293 cells. This data was developed using the same antibody clone with 87171-1-PBS in a different storage buffer formulation.



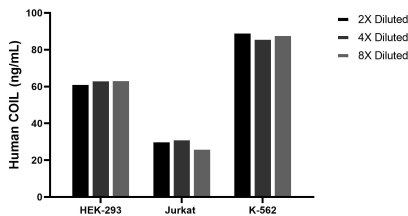
The mean Coilin concentration was determined to be 19.9 ng/mL in HEK-293 cell extract based on a 1.2 mg/mL extract load and 9.6 ng/mL in Jurkat cell extract based on a 1.2 mg/mL extract load.



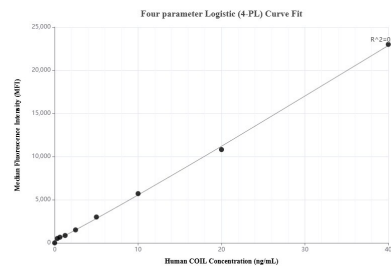
Sandwich ELISA standard curve of MP02891-1, Human Coilin Recombinant Matched Antibody Pair - PBS only. 87171-2-PBS was coated to a plate as the capture antibody and incubated with serial dilutions of standard Ag1416. 87171-1-PBS was HRP conjugated as the detection antibody. Range: 39.1-2500 pg/mL.



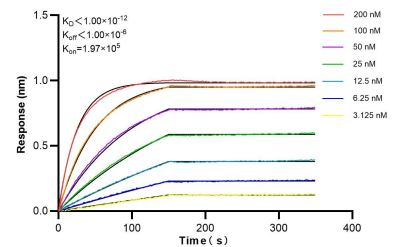
Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using COIL antibody (87171-1-RR, Clone: 252327B11) at dilution of 1:1000 and CoraLite@488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red). This data was developed using the same antibody clone with 87171-1-PBS in a different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