

For Research Use Only

RCN1 Recombinant antibody, PBS Only (Detector)

Catalog Number: 83638-3-PBS



Basic Information

Catalog Number: 83638-3-PBS	GenBank Accession Number: BC010120	Purification Method: Protein A purification
Size: 100ug , Concentration: 1 mg/ml by Nanodrop;	GeneID (NCBI): 5954	CloneNo.: 240473E9
Source: Rabbit	UNIPROT ID: Q15293	
Isotype: IgG	Full Name: reticulocalbin 1, EF-hand calcium binding domain	
Immunogen Catalog Number: AG13256	Calculated MW: 39 kDa	
	Observed MW: 44-46 kDa	

Applications

Tested Applications:
WB, IF/ICC, FC (Intra), Cytometric bead array, Indirect ELISA

Species Specificity:
human

Product Information

83638-3-PBS targets RCN1 as part of a matched antibody pair:

MP00637-3: 83638-4-PBS capture and 83638-3-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

Reticulocalbin-1 (RCN1) belongs to the CREC family. Reticulocalbin-1, an endoplasmic reticulum protein, plays a crucial role in calcium homeostasis and inhibits ER stress-induced apoptosis (PMID: 28319095). Its main functions include maintaining intracellular homeostasis and regulating cell proliferation and apoptosis, and it plays an important role in the development of various tumours (PMID: 38057406). RCN1 is expressed aberrantly and at a high level in various tumors, including acute myeloid leukemia (AML) (PMID: 37746742). In multiple cancers, such as glioblastoma, non-small cell lung cancer, renal cell carcinoma, hepatocellular carcinoma, and oral squamous cell carcinoma, the overexpression of RCN1 has been observed indicating its involvement in tumorigenesis and invasion (PMID: 30172915, PMID: 34722631).

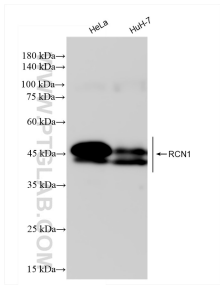
Storage

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

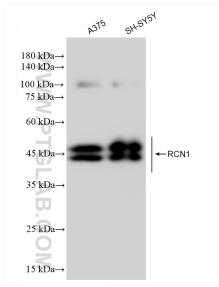
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

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

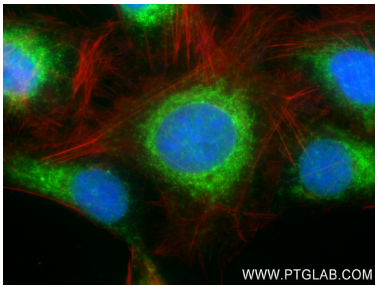
Selected Validation Data



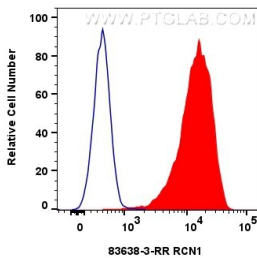
Various lysates were subjected to SDS PAGE followed by western blot with 83638-3-RR (RCN1 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 83638-3-PBS in a different storage buffer formulation.



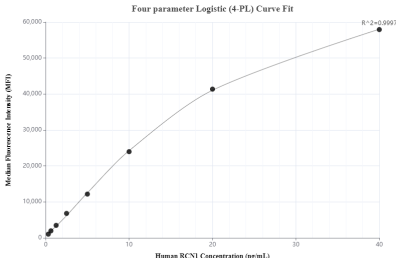
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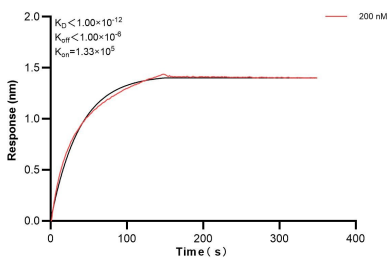
Immunofluorescent analysis of (4% PFA) fixed U2OS cells using RCN1 antibody (83638-3-RR, Clone: 240473E9) at dilution of 1:250 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red). This data was developed using the same antibody clone with 83638-3-PBS in a different storage buffer formulation.



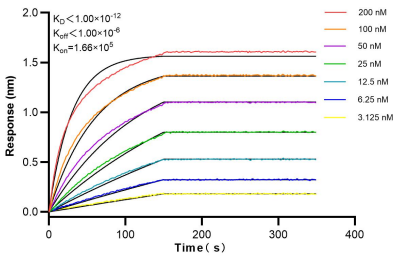
1x10⁶ HeLa cells were intracellularly stained with 0.25 ug RCN1 Recombinant antibody (83638-3-RR, Clone:240473E9) and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2)(red), or 0.25 ug Control Antibody (30000-O-AP) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C). This data was developed using the same antibody clone with 83638-3-PBS in a different storage buffer formulation.



Cytometric bead array standard curve of MP00637-3, RCN1 Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 83638-4-PBS. Detection antibody: 83638-3-PBS. Standard: Ag13256. Range: 0.313-40 ng/mL.



Biolayer interferometry (BLI) kinetic assay of 83638-3-PBS against Human RCN1 was performed. The affinity constant is below 1 pM.



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