

For Research Use Only

# RCN1 Recombinant antibody

Catalog Number: 83638-3-RR



## Basic Information

<b>Catalog Number:</b> 83638-3-RR	<b>GenBank Accession Number:</b> BC010120	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ul , Concentration: 1000 ug/ml by Nanodrop;	<b>GeneID (NCBI):</b> 5954	<b>CloneNo.:</b> 240473E9
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> Q15293	<b>Recommended Dilutions:</b> WB 1:2000-1:10000 IF/ICC 1:125-1:500
<b>Isotype:</b> IgG	<b>Full Name:</b> reticulocalbin 1, EF-hand calcium binding domain	
<b>Immunogen Catalog Number:</b> AG13256	<b>Calculated MW:</b> 39 kDa	
	<b>Observed MW:</b> 44-46 kDa	

## Applications

<b>Tested Applications:</b> WB, IF/ICC, FC (Intra), ELISA	<b>Positive Controls:</b>
<b>Species Specificity:</b> human	<b>WB :</b> HeLa cells, A375 cells, SH-SY5Y cells, HuH-7 cells <b>IF/ICC :</b> U2OS cells,

## 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

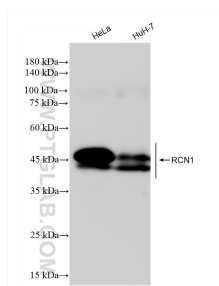
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
**Aliquoting is unnecessary for -20°C storage**

\*\*\* 20ul sizes contain 0.1% BSA

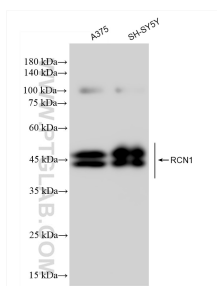
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

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

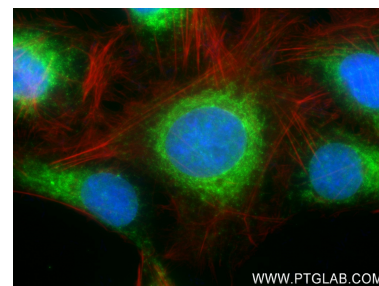
## Selected Validation Data



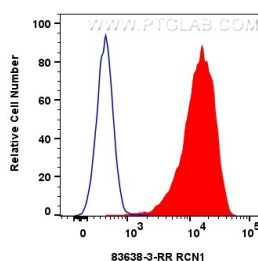
Various lysates were subjected to SDS PAGE followed by western blot with 83638-3-RR (RCN1 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



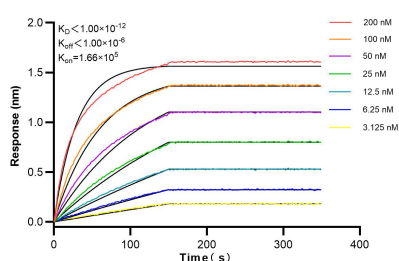
Various lysates were subjected to SDS PAGE followed by western blot with 83638-3-RR (RCN1 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



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).



1x10<sup>6</sup> 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 (30000-0-AP) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



Biolayer interferometry (BLI) kinetic assays of 83638-3-RR against Human RCN1 were performed. The affinity constant is below 1 pM.