## For Research Use Only

## RCN1 Recombinant antibody

Catalog Number:83638-3-RR



**Basic Information** 

Catalog Number:

GenBank Accession Number:

Purification Method:

83638-3-RR

BC010120

Protein A purification

Size:

GeneID (NCBI):

CloneNo.:

1000 ug/ml Source:

5954 UNIPROT ID: 240473E9
Recommended Dilutions:

Rabbit Isotype:

AG13256

Q15293

WB 1:2000-1:10000 IF/ICC 1:125-1:500

Immunogen Catalog Number:

binding domain

reticulocalbin 1, EF-hand calcium

Calculated MW:

39 kDa

Observed MW:

44-46 kDa

**Applications** 

**Tested Applications:** 

WB, IF/ICC, FC (Intra), ELISA

WB: HeLa cells, A375 cells, SH-SY5Y cells, HuH-7 cells

Species Specificity:

human

IF/ICC: U2OS cells,

Positive Controls:

## **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:

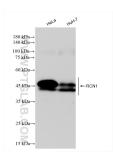
Store at -20°C. Stable for one year after shipment.

Storage Buffer:

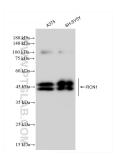
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

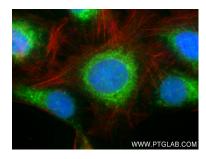
## **Selected Validation Data**



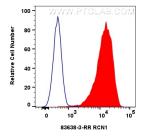
Various lysates were subjected to SDS PAGE followed by western blot with 83638-3-RR (RCN1 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



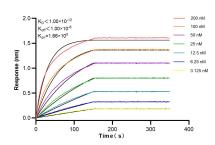
Various lysates were subjected to SDS PAGE followed by western blot with 83638-3-RR (RCN1 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



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)



1x10^6 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.