

For Research Use Only

CASQ2 Recombinant antibody

Catalog Number: 84056-6-RR



Basic Information

Catalog Number: 84056-6-RR	GenBank Accession Number: BC022288	Purification Method: Protein A purification
Size: 100ul , Concentration: 1000 ug/ml by Nanodrop;	GeneID (NCBI): 845	CloneNo.: 241211A3
Source: Rabbit	UNIPROT ID: O14958	Recommended Dilutions: WB 1:5000-1:50000 IF/ICC 1:125-1:500
Isotype: IgG	Full Name: calsequestrin 2 (cardiac muscle)	
Immunogen Catalog Number: AG33584	Calculated MW: 46 kDa	
	Observed MW: 46-55 kDa	

Applications

Tested Applications: WB, IF/ICC, FC (Intra), ELISA	Positive Controls:
Species Specificity: human, mouse, rat, pig	WB : human heart tissue, mouse heart tissue, rat heart tissue, pig heart tissue IF/ICC : C2C12 cells,

Background Information

Calsequestrin (CASQ) is a Ca²⁺-binding protein present primarily in junctional sarcoplasmic reticulum of skeletal and cardiac muscle; the cardiac form (CASQ2) is encoded by a separate gene. The primary role of CASQ2 is buffering of the sarcoplasmic reticulum Ca²⁺ ions, but another role for CASQ2 has emerged recently: CASQ2 regulates the open probability of ryanodine receptor 2 (RyR2). Mutations in CASQ2 cause stress-induced polymorphic ventricular tachycardia, also referred to as catecholaminergic polymorphic ventricular tachycardia 2 (CPVT2), a disease characterized by bidirectional ventricular tachycardia that may lead to cardiac arrest.

Storage

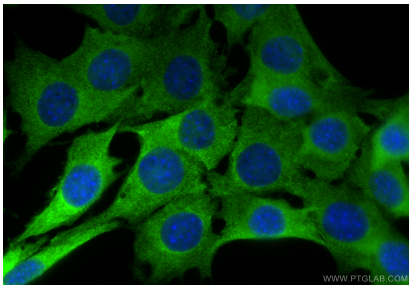
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

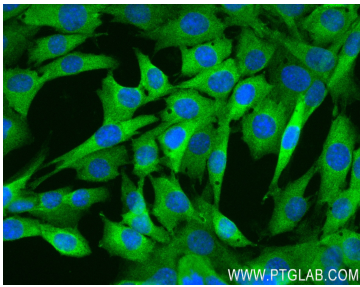
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

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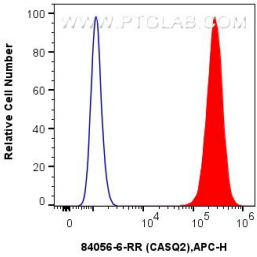
Selected Validation Data



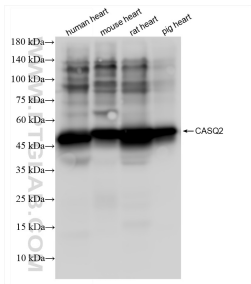
Immunofluorescent analysis of (4% PFA) fixed C2C12 cells using CASQ2 antibody (84056-6-RR, Clone: 241211A3) at dilution of 1:500 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2).



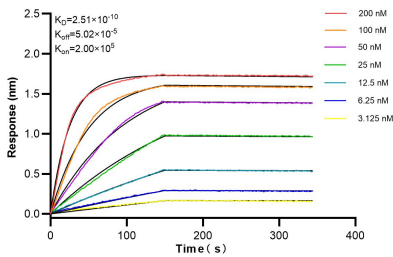
Immunofluorescent analysis of (4% PFA) fixed C2C12 cells using CASQ2 antibody (84056-6-RR, Clone: 241211A3) at dilution of 1:250 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2).



1x10⁶ U2OS cells were intracellularly stained with 0.25 ug CASQ2 Recombinant antibody (84056-6-RR, Clone:241211A3) and APC-Conjugated Goat Anti-Rabbit IgG(H+L)(red), or 0.25 ug Isotype Control (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



Various lysates were subjected to SDS PAGE followed by western blot with 84056-6-RR (CASQ2 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



Bi-layer interferometry (BLI) kinetic assays of 84056-6-RR against Human CASQ2 were performed. The affinity constant is 0.251 nM.