For Research Use Only

CASQ2 Recombinant antibody, PBS Only

Catalog Number:84056-6-PBS



Purification Method:

Protein A purfication

CloneNo.:

241211A3

Basic Information

Catalog Number: GenBank Accession Number:

84056-6-PBS BC022288

GeneID (NCBI): 100ug, Concentration: 1 mg/ml by

Nanodrop: **UNIPROT ID:** 014958 Rabbit Full Name:

Isotype: calsequestrin 2 (cardiac muscle)

IgG Calculated MW: Immunogen Catalog Number: 46 kDa AG33584 Observed MW:

46-55 kDa

Applications

Tested Applications:

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

Species Specificity: human, mouse, rat, pig

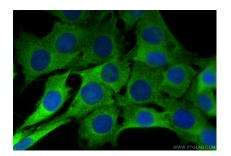
Background Information

 $Calse questrin \, (CASQ) \, is \, a \, Ca2 + - binding \, protein \, present \, primarily \, in \, junctional \, sarcoplasmic \, reticulum \, of \, skeletal \, in \, junctional \, sarcoplasmic \, reticulum \, of \, skeletal \, junctional \, sarcoplasmic \, reticulum \, of \, skeletal \, junctional \, sarcoplasmic \, reticulum \, of \, skeletal \, junctional \, sarcoplasmic \, reticulum \, of \, skeletal \, junctional \, sarcoplasmic \, reticulum \, of \, skeletal \, junctional \, sarcoplasmic \, reticulum \, of \, skeletal \, junctional \, sarcoplasmic \, reticulum \, of \, skeletal \, junctional \, sarcoplasmic \, reticulum \, of \, skeletal \, junctional \, sarcoplasmic \, reticulum \, of \, skeletal \, junctional \, sarcoplasmic \, reticulum \, of \, skeletal \, junctional \, sarcoplasmic \, reticulum \, of \, skeletal \, junctional \, sarcoplasmic \, reticulum \, of \, skeletal \, junctional \, sarcoplasmic \, reticulum \, of \, skeletal \, junctional \, sarcoplasmic \, reticulum \, of \, skeletal \, junctional \, sarcoplasmic \, reticulum \, of \, skeletal \, junctional \, sarcoplasmic \, reticulum \, of \, skeletal \, junctional \, sarcoplasmic \, reticulum \, of \, skeletal \, junctional \, sarcoplasmic \, junctional \, junctional$ 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.

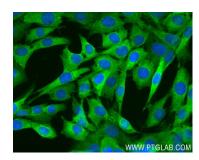
Storage

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

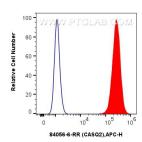
Selected Validation Data



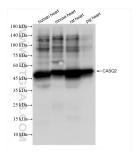
Immunofluorescent analysis of (4% PFA) fixed C2C12 cells using CASQ2 antibody (84056-6-RR, Clone: 241211A3) at dilution of 1:500 and CoraLite® 488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). This data was developed using the same antibody clone with 84056-6-PBS in a different storage buffer formulation.



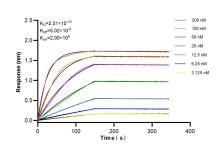
Immunofluorescent analysis of (4% PFA) fixed C2C12 cells using CASQ2 antibody (84056-6-RR, Clone: 241211A3) at dilution of 1:250 and CoraLite® 488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). This data was developed using the same antibody clone with 84056-6-PBS in a different storage buffer formulation.



1x10^6 U2OS cells were intracellularly stained with 0.25 ug CASQ2 Recombinant antibody (84056-6-RR, Clone:241211A3) and APC-Conjugated Goat Anti-Rabbit (gG(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). This data was developed using the same antibody clone with 84056-6-PBS in a different storage buffer formulation.



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. This data was developed using the same antibody clone with 84056-6-PBS in a different storage buffer formulation.



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