For Research Use Only

## CoraLite® Plus 488-conjugated CASQ2 Recombinant antibody



**Purification Method:** 

CloneNo.:

241211A3

Protein A purification

Recommended Dilutions:

Excitation/Emission maxima

IF/ICC 1:50-1:500

wavelengths: 493 nm / 522 nm

Catalog Number: CL488-84056-6

**Basic Information** 

Catalog Number: GenBank Accession Number:

CL488-84056-6 BC022288 GeneID (NCBI):

100ul, Concentration: 1000 ug/ml by 845

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:** IF/ICC, FC (Intra) Species Specificity:

human, mouse, rat, pig

Positive Controls: IF/ICC: C2C12 cells,

## **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.

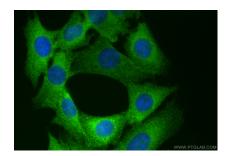
Storage

Store at -20°C. Avoid exposure to light. Stable for one year after shipment.

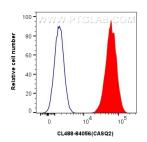
PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.

Aliquoting is unnecessary for -20°C storage

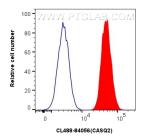
## **Selected Validation Data**



Immunofluorescent analysis of (4% PFA) fixed C2C12 cells using Coralite® Plus 488 CASQ2 antibody (CL488-84056-6, Clone: 241211A3) at dilution of 1:200.



1x10^6 U2OS cells were intracellularly stained with 0.25 ug Coralite® Plus 488 Casq2 Recombinant Antibody (CL488-84056-6, Clone:241211A3)(red), or 0.25 ug Coralite® Plus 488 Rabbit IgG Isotype Control Recombinant Antibody (CL488-98136, Clone: 240953C9) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



1x10^6 A549 cells were intracellularly stained with 0.25 ug Coralite® Plus 488 Casq2 Recombinant Antibody (CL488-84056-6, Clone:241211A3)(red), or 0.25 ug Coralite® Plus 488 Rabbit 1gG Isotype Control Recombinant Antibody (CL488-98136, Clone: 240953C9) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).