

For Research Use Only

CoraLite® Plus 488-conjugated Phospho-EIF2S1 (Ser51) Monoclonal antibody



Catalog Number: CL488-68023

1 Publications

Basic Information

Catalog Number:

CL488-68023

Size:

100ul , Concentration: 1000 ug/ml by Nanodrop;

Source:

Mouse

Isotype:

IgG1

GenBank Accession Number:

NM_004094

GeneID (NCBI):

1965

UNIPROT ID:

P05198

Full Name:

eukaryotic translation initiation factor 2, subunit 1 alpha, 35kDa

Calculated MW:

36 kDa

Observed MW:

36 kDa

Purification Method:

Protein G purification

CloneNo.:

1A4A11

Recommended Dilutions:

IF/ICC 1:50-1:500

Excitation/Emission maximum wavelengths:

493 nm / 522 nm

Applications

Tested Applications:

IF/ICC, FC (Intra)

Cited Applications:

IF

Species Specificity:

human, mouse, rat

Positive Controls:

IF/ICC : Calyculin A treated HeLa cells,

Background Information

EIF2S1 is one subunit of the translation initiation factor EIF2, which catalyzes the first regulated step of protein synthesis initiation, promoting the binding of the initiator tRNA to 40S ribosomal subunits. This complex binds to a 40S ribosomal subunit, followed by mRNA binding to form a 43S preinitiation complex. Junction of the 60S ribosomal subunit to form the 80S initiation complex is preceded by hydrolysis of the GTP bound to eIF-2 and release of an eIF-2-GDP binary complex. In order for eIF-2 to recycle and catalyze another round of initiation, the GDP bound to eIF-2 must exchange with GTP by way of a reaction catalyzed by eIF-2B. This phosphorylation stabilizes the eIF2-GDP-eIF2B complex and inhibits the turnover of eIF2B. Induction of PKR by IFN- γ and TNF- α induces potent phosphorylation of eIF2 α at Ser51.

Notable Publications

| Author | Pubmed ID | Journal | Application |
|------------|-----------|------------|-------------|
| Yonger Xue | 38272900 | Nat Commun | IF |

Storage

Storage:

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

Storage Buffer:

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

Aliquoting is unnecessary for -20°C storage

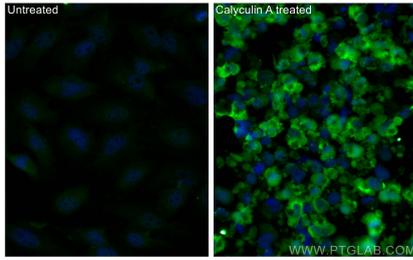
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

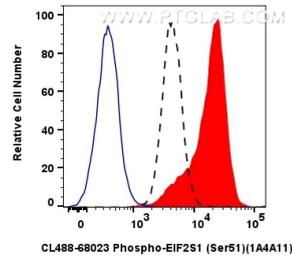
E: proteintech@ptglab.com
W: ptglab.com

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

Selected Validation Data



Immunofluorescent analysis of (4% PFA) fixed Calyculin A treated HeLa cells using Coralite® Plus 488 Phospho-EIF2S1 (Ser51) antibody (CL488-68023, Clone: 1A4A11) at dilution of 1:200.



1×10^6 Calyculin A treated PC-3 cells were intracellularly stained with 0.13 μ g Coralite® Plus 488-conjugated Phospho-EIF2S1 (Ser51) Monoclonal antibody (CL488-68023, Clone:1A4A11)(red), or 0.13 μ g Coralite® Plus 488 Mouse IgG1 Isotype Control (MOPC-21) (CL488-65124, Clone: MOPC-21) (blue). Cells were fixed with 4% PFA and permeabilized with 90% MeOH.