

For Research Use Only

CoraLite® Plus 488-conjugated EIF2S1 Recombinant antibody

Catalog Number: CL488-82936



Basic Information

Catalog Number:

CL488-82936

Concentration:

1000 µg/ml

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG1645

GenBank Accession Number:

BC002513

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 A purification

CloneNo.:

230245A12

Recommended Dilutions:

IF/ICC: 1:50-1:500

FC (Intra): 0.40 µg per 10⁶ cells in a 100 µl suspension

Excitation/Emission maximum wavelengths:

493 nm / 522 nm

Applications

Tested Applications:

IF/ICC, FC (Intra)

Species Specificity:

human, mouse, rat

Positive Controls:

IF/ICC : HepG2 cells,

FC (Intra) : HeLa cells, MCF-7 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. EIF2A (Gene ID: 83939) and EIF2S1 (Gene ID: 1965) share the EIF2A symbol/alias in common. EIF2S1 is the alpha subunit of the eIF2 translation initiation complex. Although both of these proteins function in binding initiator tRNA to the 40S ribosomal subunit, the EIF2A protein does so in a codon-dependent manner, whereas eIF2 complex requires GTP.

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, pH7.3

Aliquoting is unnecessary for -20°C storage

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

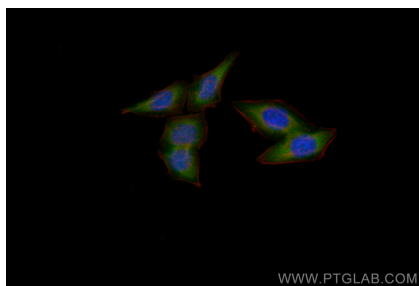
T: 4006900926

E: Proteintech-CN@ptglab.com

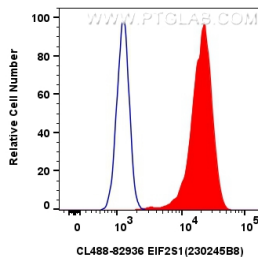
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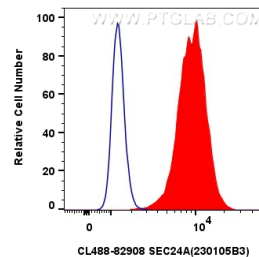
Selected Validation Data



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using Coralite® Plus 488 EIF2S1 antibody (CL488-82936, Clone: 230245A12) at dilution of 1:200.



1x10⁶ MCF-7 cells were intracellularly stained with 0.4 ug Coralite® Plus 488 Eif2s1 Recombinant Antibody (CL488-82936, Clone:230245A12)(red), or 0.4 ug Coralite® Plus 488-conjugated Rabbit IgG control Rabbit PolyAb (CL488-30000) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



1x10⁶ HeLa cells were intracellularly stained with 0.4 ug Coralite® Plus 488 Eif2s1 Recombinant Antibody (CL488-82936, Clone:230245A12)(red), or 0.4 ug Coralite® Plus 488-conjugated Rabbit IgG control Rabbit PolyAb (CL488-30000) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).