

For Research Use Only

# CoraLite® Plus 488-conjugated EIF2S1 Recombinant antibody

Catalog Number: CL488-82936



## Basic Information

<b>Catalog Number:</b> CL488-82936	<b>GenBank Accession Number:</b> BC002513	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ul , Concentration: 1000 ug/ml by Nanodrop;	<b>GeneID (NCBI):</b> 1965	<b>CloneNo.:</b> 230245A12
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P05198	<b>Recommended Dilutions:</b> IF/ICC 1:50-1:500
<b>Isotype:</b> IgG	<b>Full Name:</b> eukaryotic translation initiation factor 2, subunit 1 alpha, 35kDa	<b>Excitation/Emission maxima wavelengths:</b> 493 nm / 522 nm
<b>Immunogen Catalog Number:</b> AG1645	<b>Calculated MW:</b> 36 kDa	
	<b>Observed MW:</b> 36 kDa	

## Applications

<b>Tested Applications:</b> IF/ICC, FC (Intra)	<b>Positive Controls:</b> IF/ICC : HepG2 cells,
<b>Species Specificity:</b> human, mouse, rat	

## 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.

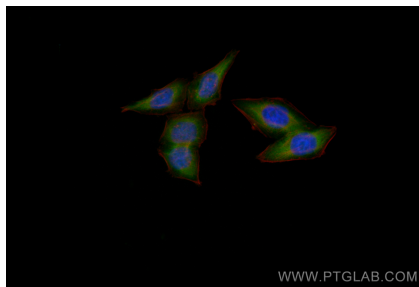
## Storage

**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, pH 7.3.  
**Aliquoting is unnecessary for -20°C storage**

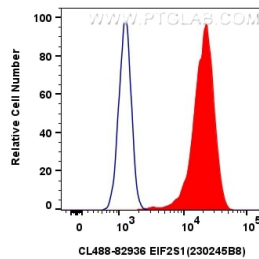
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
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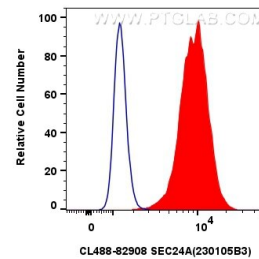
## Selected Validation Data



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



1x10<sup>6</sup> 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).



1x10<sup>6</sup> 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).