For Research Use Only

## CoraLite® Plus 647-conjugated EIF2S1 Polyclonal antibody



Catalog Number: CL647-11170

**Basic Information** 

Catalog Number: GenBank Accession Number:

CL647-11170 BC002513 GeneID (NCBI):

100ul , Concentration: 1000  $\mu g/ml$  by 1965 Nanodrop: **UNIPROT ID:** 

P05198 Rabbit Full Name:

Isotype: eukaryotic translation initiation factor 2, subunit 1 alpha, 35kDa IgG

Immunogen Catalog Number: Calculated MW: AG1645 36 kDa

Observed MW: 36 kDa

**Purification Method:** Antigen affinity purification Excitation/Emission maxima wavelengths: 654 nm / 674 nm

**Applications** 

**Tested Applications:** 

FC (Intra)

Species Specificity: 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.

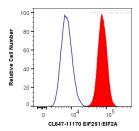
Storage

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



1X10^6 HeLa cells were intracellularly stained with 0.2 ug CoraLite® Plus 647 Anti-Human EIF2S1/EIF2A (CL647-11170) (red), or 0.2 ug CL647-30000 Rabbit IgG (blue). Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).