For Research Use Only

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

proteintech®
Antibodies | ELISA kits | Proteins
www.ptglab.com

Catalog Number:CL488-68023

1 Publications

Basic Information

Catalog Number:
CL488-68023

Size:
1000 μg/ml

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

Excitation/Emission maxima wavelengths:
493 nm / 522 nm

Applications

Tested Applications:
FC (Intra)

Cited Applications:
IF

Species Specificity:
Human, Rat, Mouse

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 eIF2α at Ser51.

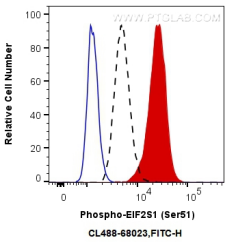
Notable Publications

Author	Pubmed ID	Journal	Application
Yonger Xue	38272900	Nat Commun	IF

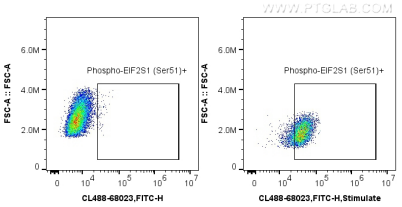
Storage

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

Selected Validation Data



1X10^6 PC-3 cells untreated (dashed lines) or treated with Calyculin A (red) were intracellularly stained with 0.5 ug CoraLite® Plus 488 Anti-Human Phospho-EIF2S1 (Ser51) (CL488-68023, Clone:1A4A11), or 0.5 ug Control Antibody (blue). Cells were fixed with 4% PFA and permeabilized with 90% MeOH.



1X10^6 PC-3 cells untreated or treated with Calyculin A were intracellularly stained with 0.5 ug CoraLite® Plus 488 Anti-Human Phospho-EIF2S1 (Ser51) (CL488-68023, Clone:1A4A11). Cells were fixed with 4% PFA and permeabilized with 90% MeOH.