

# EIF2S1 Monoclonal antibody, PBS Only (Capture)

Catalog Number: 68479-1-PBS

Featured Product

## Basic Information

**Catalog Number:**

68479-1-PBS

**Size:**

100ug, Concentration: 1mg/ml by Nanodrop;

**Source:**

Mouse

**Isotype:**

IgG1

**Immunogen Catalog Number:**

AG28309

**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 G purification

**CloneNo.:**

3C8E2

## Applications

**Tested Applications:**

WB, IF/ICC, IP, Cytometric bead array, Indirect ELISA

**Species Specificity:**

human, mouse, rat

## Product Information

68479-1-PBS targets EIF2S1 as part of a matched antibody pair.

MP50181-1: 68479-1-PBS capture and 68023-1-PBS detection (validated in Cytometric bead array)

Unconjugated mouse monoclonal antibody pair in PBS only (BSA and azide free) storage buffer at a concentration of 1 mg/mL, ready for conjugation.

This conjugation ready format makes antibodies ideal for use in many applications including: ELISAs, multiplex assays requiring matched pairs, mass cytometry, and multiplex imaging applications. Antibody use should be optimized by the end user for each application and assay.

## 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 -80°C.

**Storage Buffer:**

PBS Only

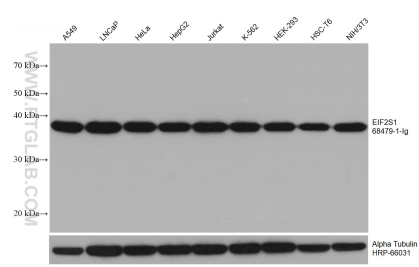
For technical support and original validation data for this product please contact:

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

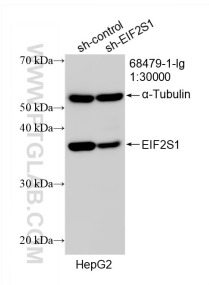
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

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

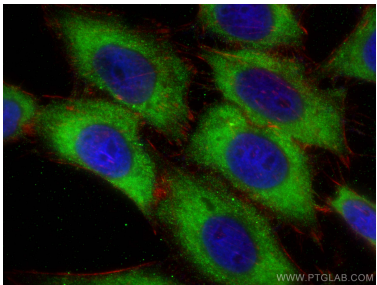
Selected Validation Data



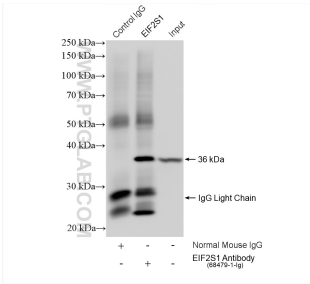
Various lysates were subjected to SDS PAGE followed by western blot with 68479-1-Ig (EIF2S1 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated Alpha Tubulin Monoclonal antibody (HRP-66031) as loading control. This data was developed using the same antibody clone with 68479-1-PBS in a different storage buffer formulation.



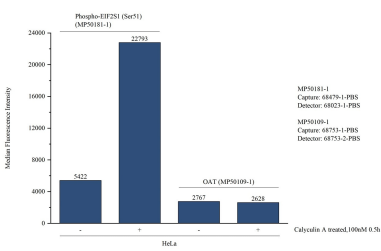
WB result of EIF2S1 antibody (68479-1-Ig; 1:30000; incubated at room temperature for 1.5 hours) with sh-Control and sh-EIF2S1 transfected HepG2 cells. This data was developed using the same antibody clone with 68479-1-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (-20°C Ethanol) fixed HepG2 cells using EIF2S1 antibody (68479-1-Ig, Clone: 3C8E2 ) at dilution of 1:800 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L), CL594-Phalloidin (red). This data was developed using the same antibody clone with 68479-1-PBS in a different storage buffer formulation.



IP result of anti-EIF2S1 (IP:68479-1-Ig, 4ug; Detection:68479-1-Ig 1:4000) with HepG2 cells lysate 1480 ug. This data was developed using the same antibody clone with 68479-1-PBS in a different storage buffer formulation.



Cytometric bead array in cell lysate using MP50181-1, Phospho-EIF2S1 (Ser51) Monoclonal Matched Antibody Pair, PBS Only. Capture antibody: 68479-1-PBS. Detection antibody: 68023-1-PBS. Cell lysate: Non-treated HeLa and Calyculin A treated HeLa (30ug/well). Non-related target OAT Monoclonal Matched Antibody Pair (MP50109-1P) was served as control.