

# EIF2S2 Monoclonal antibody

Catalog Number: 68463-1-Ig

## Basic Information

**Catalog Number:**

68463-1-Ig

**Concentration:**

500 ug/ml

**Source:**

Mouse

**Isotype:**

IgG1

**Immunogen Catalog Number:**

AG18349

**GenBank Accession Number:**

BC000461

**GeneID (NCBI):**

8894

**UNIPROT ID:**

P20042

**Full Name:**

eukaryotic translation initiation factor 2, subunit 2 beta, 38kDa

**Calculated MW:**

38 kDa

**Observed MW:**

50 kDa

**Purification Method:**

Protein G purification

**CloneNo.:**

2H8E1

**Recommended Dilutions:**

WB 1:5000-1:50000

## Applications

**Tested Applications:**

WB, ELISA

**Species Specificity:**

human, mouse, rat

**Positive Controls:**

WB : A549 cells, LNCaP cells, HeLa cells, HEK-293 cells, HepG2 cells, Jurkat cells, K-562 cells, HSC-T6 cells, NIH/3T3 cells

## Background Information

Eukaryotic translation initiation factor 2 (eIF2) is composed of three subunits, eIF2 alpha, eIF2 beta (EIF2S2), and eIF2 gamma, which are present in equal molar amounts. eIF2 beta plays a central role in the maintenance of what is generally considered a rate-limiting step in mRNA translation. In the early steps of protein synthesis, eIF2 beta binds GTP and Met-tRNA and transfers Met-tRNA to the 40S ribosomal subunit. At the end of the initiation process, GTP bound to eIF2 beta is hydrolyzed to GDP and the eIF2/GDP complex is released from the ribosome. The exchange of GDP bound to eIF2 beta for GTP is a prerequisite to binding Met-tRNA and is mediated by eIF2 beta, which recycles the eIF2 complex for another round of initiation.

## Storage

**Storage:**

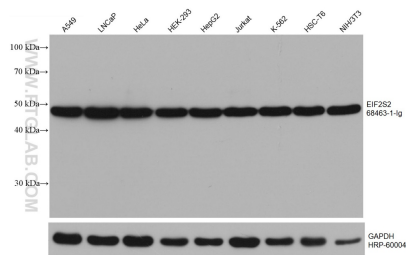
Store at -20°C. Stable for one year after shipment.

**Storage Buffer:**

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

## Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 68463-1-Ig (EIF2S2 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated GAPDH Monoclonal antibody (HRP-60004) as loading control.