

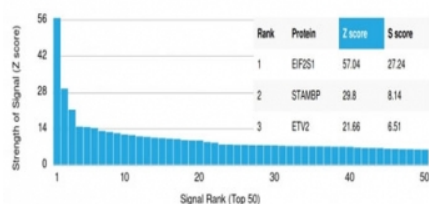
EIF2S1 Antibody / EIF2A [clone PCRP-EIF2S1-1C11] (V9225)

Catalog No.	Formulation	Size
V9225-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V9225-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V9225SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

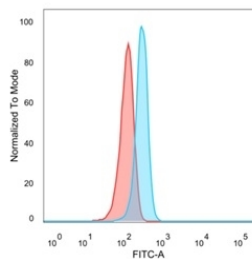
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Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2a
Clone Name	PCRP-EIF2S1-1C11
Purity	Protein A/G affinity
UniProt	P05198
Localization	Nucleus
Applications	Flow Cytometry : 1-2ug/million cells
Limitations	This EIF2S1 antibody is available for research use only.

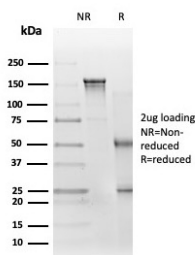
Human Protein Microarray Specificity Validation



Analysis of HuProt(TM) microarray containing more than 19,000 full-length human proteins using EIF2S1 antibody (clone PCRP-EIF2S1-1C11). These results demonstrate the foremost specificity of the PCRP-EIF2S1-1C11 mAb. Z- and S- score: The Z-score represents the strength of a signal that an antibody (in combination with a fluorescently-tagged anti-IgG secondary Ab) produces when binding to a particular protein on the HuProt(TM) array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If the targets on the HuProt(TM) are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-scores. The S-score therefore represents the relative target specificity of an Ab to its intended target.



FACS staining of PFA-fixed human HeLa cells with EIF2S1 antibody (blue, clone PCRP-EIF2S1-1C11) and isotype control (red).



SDS-PAGE analysis of purified, BSA-free EIF2S1 antibody (clone PCRP-EIF2S1-1C11) as confirmation of integrity and purity.

Description

The initiation of protein synthesis in eukaryotic cells is regulated by interactions between protein initiation factors and RNA molecules. The eukaryotic initiation complex is composed of three subunits, designated eIF2a, eIF2band eIF2g (eukaryotic translation initiation factor 2 a, band g, respectively), all of which work in concert to form a ternary complex with GTP and tRNA in the early stages of protein synthesis. eIF2a, also known as EIF2S1 or EIF2, is a 315 amino acid subunit of the eukaryotic initiation complex that functions to bind tRNA to the 40S ribosomal subunit (in a GTP-dependent manner), thereby initiating translation. In addition, the phosphorylation state of eIF2a controls the rate of tRNA translation. When eIF2a is not phosphorylated, translation occurs at a normal rate. However, upon phosphorylation by one of several kinases, eIF2a is stabilized, thus preventing the GDP/GTP exchange reaction and slowing translation.

Application Notes

Optimal dilution of the EIF2S1 antibody should be determined by the researcher.

Immunogen

Recombinant full-length human EIF2S1/EIF2A protein was used as the immunogen for the EIF2S1 antibody.

Storage

Aliquot the EIF2S1 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.