

EIF2S1 Protein

Full length human recombinant protein expressed in E.coli cells

Catalog # E23-54H

Lot # T762-3

Product Description

Recombinant full length human EIF2S1 was expressed in E. coli cells using an N-terminal His tag. The gene accession number is [NM_004094](#).

Gene Aliases

EIF-2; EIF-2A; EIF-2alpha; EIF2; EIF2A

Formulation

Recombinant protein stored in 50mM sodium phosphate, pH 7.0, 300mM NaCl, 150mM imidazole, 0.1mM PMSF, 0.25mM DTT, 25% glycerol.

Storage and Stability

Store product at -70°C. For optimal storage, aliquot target into smaller quantities after centrifugation and store at recommended temperature. For most favorable performance, avoid repeated handling and multiple freeze/thaw cycles.

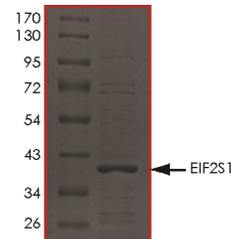
Scientific Background

EIF2S1, also known as eukaryotic translation initiation factor 2, subunit 1 alpha, is a 35kDa protein in which The translation initiation factor EIF2 catalyzes the first regulated step of protein synthesis initiation and promotes the binding of the initiator tRNA to 40S ribosomal subunits. Binding occurs as a ternary complex of methionyl-tRNA, EIF2, and GTP (1). The Ser51 in the mature human EIF2-alpha protein acts as the sole site of phosphorylation that leads to repression of protein synthesis. EIF2-alpha also plays an essential role in erythropoiesis (2).

References

- Ernst, H. et.al: Cloning and sequencing of complementary DNAs encoding the alpha-subunit of translational initiation factor eIF-2: characterization of the protein and its messenger RNA. J. Biol. Chem. 262: 1206-1212, 1987.
- Pathak, V. K.et.al: Generation of a mutant form of protein synthesis initiation factor eIF-2 lacking the site of phosphorylation by eIF-2 kinases. Molec. Cell. Biol. 8: 993-995, 1988.

Purity



The purity of EIF2S1 was determined to be **>90%** by densitometry. Approx. MW **40 kDa**.

Upstream Active Kinases

EIF2AK1, Active	Cat. # H07-10G
EIF2AK2, Active	Cat. # P80-11G
EIF2AK3, Active	Cat. # E11-11G
EIF2AK4, Active	Cat. # E12-11G

EIF2S1 Protein

Full length recombinant protein expressed in E. coli cells

Catalog #	E23-54H
Lot #	T762-3
Purity	>90%
Concentration	0.2µg/µl
Stability	1yr at -70°C from date of shipment
Storage & Shipping	Store product at -70°C. For optimal storage, aliquot target into smaller quantities after centrifugation and store at recommended temperature. For most favorable performance, avoid repeated handling and multiple freeze/thaw cycles. Product shipped on dry ice.

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