# Recombinant Eukaryotic Translation Initiation Factor 2 Subunit 1 (EIF2S1)(N-6His)

*Catalog#:PEH22511*

## 概述（Summary）

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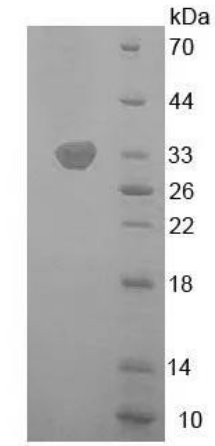
| **别称（Alternative Names）** | EIF-2; EIF-2A; EIF-2alpha; EIF2; EIF2A; Eukaryotic translation initiation factor 2 subunit alpha |
| **纯度（Purity）** | Greater than 95% as determined by reducing SDS-PAGE. |
| **内毒素（Endotoxin level）** | <1 EU/μg as determined by LAL test. |
| **蛋白构建（Construction）** | 6His-【Met1-Thr239】 |
| **Accession #** | P05198 |
| **表达宿主（Host）** | E.coli |
| **种属（Species）** | Homo sapiens (Human) |
| **预测分子量（Predicted MW）** | 31.7 kDa |
| **制剂（Form）** | Lyophilized from a 0.2 μm filtered solution of PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300. |
| **运输方式（Shipping）** | The product is shipped with ice bag. Upon receipt, store it immediately at the temperature listed below. |
| **稳定性&储存（Stability &Storage）** | 12 months at -20°C to -80°C in lyophilized state.6 months at -20°C to -80°C under sterile conditions after reconstitution.7-10 days at 2°C to 8°C under sterile conditions after reconstitution.Please minimize freeze-thaw cycles. |
| **复溶（Reconstitution）** | Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex. |
| **背景介绍（References）** | Functions in the early steps of protein synthesis by forming a ternary complex with GTP and initiator tRNA. This complex binds to a 40S ribosomal subunit, followed by mRNA binding to form a 43S pre-initiation 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. EIF2S1/eIF-2-alpha is a key component of the integrated stress response |

(ISR), required for adaptation to various stress: phosphorylation by metabolic-stress sensing protein kinases (EIF2AK1/HRI, EIF2AK2/PKR, EIF2AK3/PERK and EIF2AK4/GCN2) in response to stress converts EIF2S1/eIF-2-alpha in a global protein synthesis inhibitor, leading to an attenuation of cap-dependent translation, while concomitantly initiating the preferential translation of ISR-specific mRNAs, such as the transcriptional activators ATF4 and QRICH1, and hence allowing ATF4- and QRICH1-mediated reprogramming.

## 电泳图（SDS-PAGE image）



15% SDS-PAGE

Greater than 95% as determined by reducing SDS-PAGE.

## 注意事项（Note）

For Research Use Only , Not for Diagnostic Use.