

## Product datasheet for PH300368

#### OriGene Technologies, Inc.

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# elF2 alpha (EIF2S1) (NM 004094) Human Mass Spec Standard

#### **Product data:**

**Product Type:** Mass Spec Standards

**Description:** EIF2S1 MS Standard C13 and N15-labeled recombinant protein (NP\_004085)

Species: Human **HEK293 Expression Host: Expression cDNA Clone** 

RC200368

or AA Sequence: Predicted MW:

36.1 kDa

>RC200368 protein sequence **Protein Sequence:** 

Red=Cloning site Green=Tags(s)

MPGLSCRFYQHKFPEVEDVVMVNVRSIAEMGAYVSLLEYNNIEGMILLSELSRRRIRSINKLIRIGRNEC VVVIRVDKEKGYIDLSKRRVSPEEAIKCEDKFTKSKTVYSILRHVAEVLEYTKDEQLESLFQRTAWVFDD KYKRPGYGAYDAFKHAVSDPSILDSLDLNEDEREVLINNINRRLTPQAVKIRADIEVACYGYEGIDAVKE ALRAGLNCSTENMPIKINLIAPPRYVMTTTTLERTEGLSVLSQAMAVIKEKIEEKRGVFNVQMEPKVVTD

**TDETELARQMERLERENAEVDGDDDAEEMEAKAED** 

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

C-Myc/DDK Tag:

**Purity:** > 80% as determined by SDS-PAGE and Coomassie blue staining

Concentration: >0.05 µg/µL as determined by microplate BCA method

**Labeling Method:** Labeled with [U-13C6, 15N4]-L-Arginine and [U-13C6, 15N2]-L-Lysine

**Buffer:** 25 mM Tris-HCl, 100 mM glycine, pH 7.3

Store at -80°C. Avoid repeated freeze-thaw cycles. Storage:

Stability: Stable for 3 months from receipt of products under proper storage and handling conditions.

NP 004085 RefSeq:

RefSeq Size: 4165 RefSeq ORF: 945

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

Locus ID: 1965





UniProt ID: <u>P05198</u>, <u>Q53XC0</u>

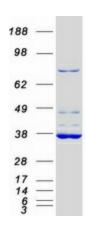
Cytogenetics: 14q23.3

**Summary:** The translation initiation factor EIF2 catalyzes the first regulated step of protein synthesis

initiation, promoting the binding of the initiator tRNA to 40S ribosomal subunits. Binding occurs as a ternary complex of methionyl-tRNA, EIF2, and GTP. EIF2 is composed of 3 nonidentical subunits, the 36-kD EIF2-alpha subunit (EIF2S1), the 38-kD EIF2-beta subunit (EIF2S2; MIM 603908), and the 52-kD EIF2-gamma subunit (EIF2S3; MIM 300161). The rate of formation of the ternary complex is modulated by the phosphorylation state of EIF2-alpha

(Ernst et al., 1987 [PubMed 2948954]).[supplied by OMIM, Feb 2010]

### **Product images:**



Coomassie blue staining of purified EIF2S1 protein (Cat# [TP300368]). The protein was produced from HEK293T cells transfected with EIF2S1 cDNA clone (Cat# [RC200368]) using MegaTran 2.0 (Cat# [TT210002]).