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## AP26039PU-S Polyclonal Antibody to EIF2B / EIF2S2 pSer2 - Aff - Purified

Alternate names: Eukaryotic translation initiation factor 2 subunit 2, Eukaryotic translation initiation

factor 2 subunit beta, eIF-2-beta, eIF2-beta

Quantity: 50 μg Concentration: 1.0 mg/ml

**Background:** eIF-2 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 preinitiation 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.

Uniprot ID: <u>P20042</u>

NCBI: NP 003899

GenelD: 8894
Host: Rabbit

**Immunogen:** Peptide sequence around phosphorylation site of serine 2 derived from eIF2β.

**AA Sequence:** M-S(p)-G-D-E

Format: State: Liquid Ig fraction

Purification: Affinity-chromatography using epitope-specific peptide

Buffer System: Phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM

NaCl, 0.02% sodium azide and 50% glycerol

**Applications:** Western blot: 1:500 - 1:1000.

Other applications not tested. Optimal dilutions are dependent on conditions and

should be determined by the user.

Specificity: This antibody detects endogenous levels of eIF2β only when phosphorylated at serine

2.

Species Reactivity: Tested: Human, mouse
Add. Information: Molecular weight: 38 kDa

Storage: Store (in aliquots) at -20 °C. Avoid repeated freezing and thawing.

Shelf life: one year from despatch.

General Readings: 1. Pathak VK, Nielsen PJ, Trachsel H, Hershey JW. Structure of the beta subunit of

translational initiation factor eIF-2. Cell. 1988 Aug 26;54(5):633-9. PubMed PMID:

3044606.



**Pictures:** 

Western blot analysis of extracts from C2C12 cells untreated or treated with PMA using eIF2β (phospho-Ser2) Antibody AP26039PU-N.

