

eIF2 β (N-13): sc-31886

BACKGROUND

The initiation of protein synthesis in eukaryotic cells is regulated by interactions between protein initiation factors and RNA molecules. The eukaryotic initiation complex eIF2 exists as a heterotrimeric complex of eIF2 α , eIF2 β and eIF2 γ . eIF2 functions in the early stages of protein synthesis, by forming a ternary complex with GTP and tRNA. This complex binds to the 40S ribosomal subunit, followed by mRNA binding to 40S to form the 43S preinitiation complex, the release of eIF2 from 40S and the hydrolysis of GTP. Phosphorylation of eIF2 α correlates with inhibition of translation initiation.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: EIF2S2 (human) mapping to 20pter-q12; Eif2s2 (mouse) mapping to 2 H1.

SOURCE

eIF2 β (N-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of eIF2 β of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-31886 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4 $^{\circ}$ C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

eIF2 β (N-13) is recommended for detection of eIF2 β of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for eIF2 β siRNA (h): sc-35270, eIF2 β siRNA (m): sc-35271, eIF2 β shRNA Plasmid (h): sc-35270-SH, eIF2 β shRNA Plasmid (m): sc-35271-SH, eIF2 β shRNA (h) Lentiviral Particles: sc-35270-V and eIF2 β shRNA (m) Lentiviral Particles: sc-35271-V.

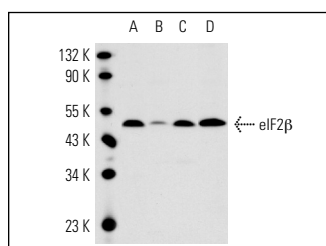
Molecular Weight of eIF2 β : 45 kDa.

Positive Controls: KNRK whole cell lysate: sc-2214, NIH/3T3 whole cell lysate: sc-2210 or A-431 whole cell lysate: sc-2201.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



eIF2 β (N-13): sc-31886. Western blot analysis of eIF2 β expression in KNRK (A), Jurkat (B), K-562 (C) and NIH/3T3 (D) whole cell lysates.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

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Try **eIF2 β (P-3): sc-9978** or **eIF2 β (C-1): sc-133133**, our highly recommended monoclonal alternatives to eIF2 β (N-13).