

# eIF2B $\delta$ (C-20): sc-31891

## BACKGROUND

The initiation of protein synthesis in eukaryotic cells is regulated by interactions between protein initiation factors and RNA molecules. The eukaryotic initiation complex eIF2B exists as a five subunit complex composed of eIF2B $\alpha$ , eIF2B $\beta$ , eIF2B $\gamma$ , eIF2B $\delta$  and eIF2B $\epsilon$ . The eIF2B complex catalyzes the exchange of GDP for GTP on the eIF2 complex, following the interaction of eIF2/GTP with the 40S ribosomal subunit. Guanine nucleotide exchange factor (GEF) activity was exhibited by the eIF2B $\epsilon$  subunit alone, but it was greater in the presence of all five eIF2B subunits. Phosphorylation of eIF2 inhibits GEF activity of eIF2B, an inhibition that requires the eIF2B $\alpha$  subunit.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: EIF2B4 (human) mapping to 2p23.3; Eif2b4 (mouse) mapping to 5 B1.

## SOURCE

eIF2B $\delta$  (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of eIF2B $\delta$  of human origin.

## PRODUCT

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

Blocking peptide available for competition studies, sc-31891 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

eIF2B $\delta$  (C-20) is recommended for detection of eIF2B $\delta$  of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ 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).

eIF2B $\delta$  (C-20) is also recommended for detection of eIF2B $\delta$  in additional species, including canine, bovine and avian.

Suitable for use as control antibody for eIF2B $\delta$  siRNA (h): sc-35276, eIF2B $\delta$  siRNA (m): sc-35277, eIF2B $\delta$  shRNA Plasmid (h): sc-35276-SH, eIF2B $\delta$  shRNA Plasmid (m): sc-35277-SH, eIF2B $\delta$  shRNA (h) Lentiviral Particles: sc-35276-V and eIF2B $\delta$  shRNA (m) Lentiviral Particles: sc-35277-V.

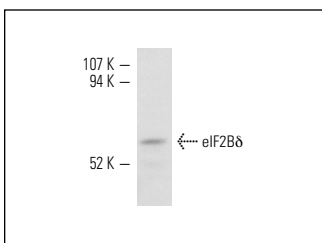
Molecular Weight of eIF2B $\delta$ : 60 kDa.

Positive Controls: KNRK whole cell lysate: sc-2214, COLO 320DM cell lysate: sc-2226 or K-562 whole cell lysate: sc-2203.

## 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<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> 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<sup>™</sup> Mounting Medium: sc-24941.

## DATA



eIF2B $\delta$  (C-20): sc-31891. Western blot analysis of eIF2B $\delta$  expression in K-562 whole cell lysate.

## STORAGE

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

## RESEARCH USE

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