# EF-1 $\delta$ (N-17): sc-68484



The Power to Question

## **BACKGROUND**

EF-1 (elongation factor-1) is a multi-protein complex that is comprised of  $\alpha,\,\beta,\,\gamma$  and  $\delta$  subunits, all of which work together to ensure the delivery of amino-acyl-tRNAs to the ribosome, thereby elongating mRNA. EF-1  $\delta$ , also known as EEF1D, is a 281 amino acid subunit of the EF-1 complex. Functioning as a guanine nucleotide exchange factor, EF-1  $\delta$  stimulates the exchange of EF-1  $\alpha$ -bound GDP for GTP. Additionally, EF-1  $\delta$  is thought to interact with HIV-1 Tat and may repress host-cell mRNA transcription. Overexpression of EF-1  $\delta$  is associated with oesophageal carcinoma and may adversely affect the outcome of medulloblastomas, suggesting that the role that EF-1  $\delta$  plays in transcriptional elongation is important for the tight control and regulation of the cell cycle. Multiple isoforms of EF-1  $\delta$  exist due to alternative splicing events.

# **REFERENCES**

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- 8. Yang, S., et al. 2007. BMP-6 promotes E-cadherin expression through repressing EF-1  $\delta$  in breast cancer cells. BMC Cancer 7: 211.
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## **CHROMOSOMAL LOCATION**

Genetic locus: EEF1D (human) mapping to 8q24.3; Eef1d (mouse) mapping to 15 D3.

## **SOURCE**

EF-1  $\delta$  (N-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of EF-1  $\delta$  of human origin.

# **RESEARCH USE**

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

#### **PRODUCT**

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

Blocking peptide available for competition studies, sc-68484 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-68484 X, 200  $\mu$ g/0.1 ml.

# **APPLICATIONS**

EF-1  $\delta$  (N-17) is recommended for detection of EF-1  $\delta$  of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

EF-1  $\delta$  (N-17) is also recommended for detection of EF-1-  $\delta$  in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for EF-1  $\delta$  siRNA (h): sc-77235, EF-1  $\delta$  siRNA (m): sc-77237, EF-1  $\delta$  shRNA Plasmid (h): sc-77235-SH, EF-1  $\delta$  shRNA Plasmid (m): sc-77237-SH, EF-1  $\delta$  shRNA (h) Lentiviral Particles: sc-77235-V and EF-1  $\delta$  shRNA (m) Lentiviral Particles: sc-77237-V.

EF-1  $\delta$  (N-17) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of EF-1 δ: 31 kDa.

## **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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## **STORAGE**

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

## **PROTOCOLS**

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

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