

EF-1 γ (X5-P): sc-101035

BACKGROUND

EF-1 (elongation factor-1) is a multi-protein complex that is responsible for the delivery of aminoacyl-tRNAs to the ribosome. EF-1 γ (elongation factor-1 γ), also known as EEF1G or GIG35, is a 437 amino acid subunit of the EF-1 complex. Expressed in stomach, pancreas, brain, lung, kidney, intestine, liver and spleen, EF-1 γ contains an N-terminal Glutathione transferase domain which is thought to be involved in anchoring the complex to various cellular components. Additionally, EF-1 γ may play a key role in the assembly of multi-protein complexes containing aminoacyl-tRNA synthetases. Increased expression of EF-1 γ is associated with pancreatic cancer, suggesting a possible role for EF-1 γ in the oncogenic transformation process.

REFERENCES

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- Lew, Y., et al. 1992. Expression of elongation factor-1 γ -related sequence in human pancreatic cancer. *Pancreas* 7: 144-152.
- Koonin, E.V., et al. 1994. Eukaryotic translation elongation factor-1 γ contains a Glutathione transferase domain—study of a diverse, ancient protein superfamily using motif search and structural modeling. *Protein Sci.* 3: 2045-2054.
- Wang, C.C., et al. 2004. Molecular hierarchy in neurons differentiated from mouse ES cells containing a single human chromosome 21. *Biochem. Biophys. Res. Commun.* 314: 335-350.
- Yoon, S.Y., et al. 2006. Gene expression profiling of human HBV- and/or HCV-associated hepatocellular carcinoma cells using expressed sequence tags. *Int. J. Oncol.* 29: 315-327.
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CHROMOSOMAL LOCATION

Genetic locus: EEF1G (human) mapping to 11q12.3; Eef1g (mouse) mapping to 19 A.

SOURCE

EF-1 γ (X5-P) is a mouse monoclonal antibody raised against recombinant EF-1 γ of human origin.

PRODUCT

Each vial contains 100 μ g IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

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

APPLICATIONS

EF-1 γ (X5-P) is recommended for detection of EF-1 γ 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 EF-1 γ siRNA (h): sc-96325, EF-1 γ siRNA (m): sc-155889, EF-1 γ shRNA Plasmid (h): sc-96325-SH, EF-1 γ shRNA Plasmid (m): sc-155889-SH, EF-1 γ shRNA (h) Lentiviral Particles: sc-96325-V and EF-1 γ shRNA (m) Lentiviral Particles: sc-155889-V.

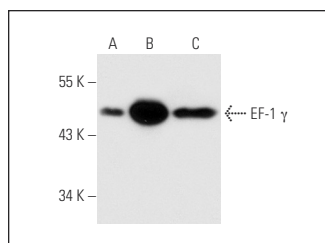
Molecular Weight of EF-1 γ : 50 kDa.

Positive Controls: EF-1 γ (m2): 293T Lysate: sc-119924, EF-1 γ (h2): 293T Lysate: sc-114807 or JAR cell lysate: sc-2276.

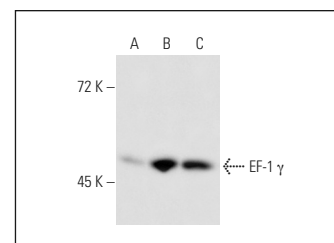
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



EF-1 γ (X5-P): sc-101035. Western blot analysis of EF-1 γ expression in non-transfected 293T: sc-117752 (A), human EF-1 γ transfected 293T: sc-114807 (B) and JAR (C) whole cell lysates.



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RESEARCH USE

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

PROTOCOLS

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