



## EF-1 $\alpha$ 1 (h10): 293T Lysate: sc-117345

### BACKGROUND

The elongation factor-1 complex is composed of two subunits, EF-1  $\alpha$ 1 (elongation factor 1- $\alpha$  1) and EF-1  $\alpha$ 2 (elongation factor 1- $\alpha$  2), and is responsible for the delivery of aminoacyl tRNAs to the ribosome. EF-1  $\alpha$ 1 is expressed predominantly in brain, placenta, lung, liver, kidney and pancreas, while EF-1  $\alpha$ 2 is highly expressed in heart, brain and skeletal muscle. Both EF-1  $\alpha$ 1 and  $\alpha$ 2 localize to the nucleus and belong to the GTP-binding elongation factor family. The gene encoding EF-1  $\alpha$ 2, which maps to human chromosome 20q13.3, may play a role in the development of ovarian cancer, while the EF-1  $\alpha$ 1 gene, mapping to chromosome 6q13, is commonly present as an autoantigen in patients with Felty syndrome. Felty syndrome is a disorder characterized by rheumatoid arthritis, a swollen spleen, decreased white blood cell count, and increased susceptibility to infection.

### REFERENCES

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3. Kraal, B., Lippmann, C. and Kleantous, C. 1999. Translational regulation by modifications of the elongation factor Tu. *Folia Microbiol.* 44: 131-141.
4. Martemyanov, K.A. and Gudkov, A.T. 2000. Domain III of elongation factor G from *Thermus thermophilus* is essential for induction of GTP hydrolysis on the ribosome. *J. Biol. Chem.* 275: 35820-35824.
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### CHROMOSOMAL LOCATION

Genetic locus: EEF1A1 (human) mapping to 6q13.

### PRODUCT

EF-1  $\alpha$ 1 (h10): 293T Lysate represents a lysate of human EF-1  $\alpha$ 1 transfected 293T cells and is provided as 100  $\mu$ g protein in 200  $\mu$ l SDS-PAGE buffer.

### APPLICATIONS

EF-1  $\alpha$ 1 (h10): 293T Lysate is suitable as a Western Blotting positive control for human reactive EF-1  $\alpha$ 1 antibodies. Recommended use: 10-20  $\mu$ l per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

### STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

### RESEARCH USE

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

### PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.