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- Gefahrgutzuschlag
- Expressversand

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# SELB (m2): 293T Lysate: sc-123436

## BACKGROUND

SELB (selenocysteine-specific elongation factor), also known as EEFSEC (eukaryotic elongation factor, selenocysteine-tRNA-specific) or EFSEC, is a 596 amino acid protein that localizes to both the nucleus and the cytoplasm and belongs to the GTP-binding elongation factor family. Functioning as a translation factor, SELB binds GTP and GDP and is necessary for the incorporation of selenocysteine into target proteins. The gene encoding SELB maps to human chromosome 3, which houses over 1,100 genes, including a chemokine receptor (CKR) gene cluster and a variety of human cancer-related gene loci. Key tumor suppressing genes on chromosome 3 include those that encode the apoptosis mediator RASSF1, the cell migration regulator HYAL1 and the angiogenesis suppressor SEMA3B. Marfan syndrome, porphyria, von Hippel-Lindau syndrome, osteogenesis imperfecta and Charcot-Marie-Tooth disease are a few of the numerous genetic diseases associated with chromosome 3.

## REFERENCES

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3. Online Mendelian Inheritance in Man, OMIM<sup>™</sup>. 2003. Johns Hopkins University, Baltimore, MD. MIM Number: 607695. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
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5. Caban, K. and Copeland, P.R. 2006. Size matters: a view of selenocysteine incorporation from the ribosome. *Cell. Mol. Life Sci.* 63: 73-81.
6. Gupta, M. and Copeland, P.R. 2007. Functional analysis of the interplay between translation termination, selenocysteine codon context, and selenocysteine insertion sequence-binding protein 2. *J. Biol. Chem.* 282: 36797-36807.
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8. Donovan, J., Caban, K., Ranaweera, R., Gonzalez-Flores, J.N. and Copeland, P.R. 2008. A novel protein domain induces high affinity selenocysteine insertion sequence binding and elongation factor recruitment. *J. Biol. Chem.* 283: 35129-35139.

## CHROMOSOMAL LOCATION

Genetic locus: Eefsec (mouse) mapping to 6 D1.

## PRODUCT

SELB (m2): 293T Lysate represents a lysate of mouse SELB transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

## APPLICATIONS

SELB (m2): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive SELB antibodies.

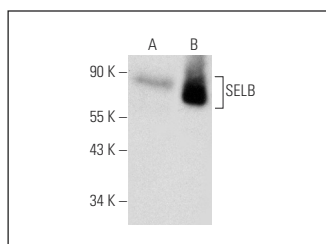
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

SELB (F-4): sc-365707 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse SELB expression in SELB transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

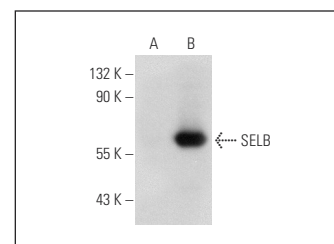
## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, UltraCruz<sup>®</sup> Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

## DATA



SELB (F-4): sc-365707. Western blot analysis of SELB expression in non-transfected: sc-117752 (A) and mouse SELB transfected: sc-123436 (B) 293T whole cell lysates.



SELB (G-9): sc-166521. Western blot analysis of SELB expression in non-transfected: sc-117752 (A) and mouse SELB transfected: sc-123436 (B) 293T whole cell lysates.

## 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.