



# SZABO SCANDIC

Part of Europa Biosite

## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!  
See the following pages for more information!



### Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

### SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

[mail@szabo-scandic.com](mailto:mail@szabo-scandic.com)

[www.szabo-scandic.com](http://www.szabo-scandic.com)

[linkedin.com/company/szaboscandic](https://www.linkedin.com/company/szaboscandic) 

# ITF-2 (m): 293T Lysate: sc-121127

## BACKGROUND

Immunoglobulin transcription factor 2 (ITF-2), also designated transcription factor 4 and SL3-3 enhancer factor 2 (SEF-2) is a basic helix-turn-helix transcription factor. ITF-2 binds to the immunoglobulin enhancer Mu-E5/KE5-motif and to the Ephrussi-box (E-box) element present in SSTR2-INR and serves as an activator of transcription in muscle-specific genes. ITF-2 preferentially binds to either 5'-ACANNTGT-3' or 5'-CCANNTGG-3'. ITF-2 belongs to the class of simple bHLH transcription factors identified as ubiquitous E-box binding factors, which also includes the E2A gene products (E12 and E47) and HEB. The protein is expressed in adult heart, brain, placenta, skeletal muscle and embryonic brain. ITF-2 forms homo- or hetero-oligomers with myogenin and Myo D; alternatively spliced isoforms of ITF-2 function to activate or repress their transcription.

## REFERENCES

- Henthorn, P., McCarrick-Walmsley, R. and Kadesch, T. 1990. Sequence of the cDNA encoding ITF, a positive-acting transcription factor. *Nucleic Acids Res.* 18: 678-678.
- Henthorn, P., Kiledjian, M. and Kadesch, T. 1990. Two distinct transcription factors that bind the immunoglobulin enhancer microE5/ $\kappa$  2 motif. *Science* 247: 467-470.
- French, B.A., Chow, K.L., Olson, E.N. and Schwartz, R.J. 1991. Heterodimers of myogenic helix-loop-helix regulatory factors and E12 bind a complex element governing myogenic induction of the avian cardiac  $\alpha$ -Actin promoter. *Mol. Cell. Biol.* 11: 2439-2450.
- Corneliusson, B., Thornell, A., Hallberg, B. and Grundström, T. 1991. Helix-loop-helix transcriptional activators bind to a sequence in glucocorticoid response elements of retrovirus enhancers. *J. Virol.* 65: 6084-6093.
- Skerjanc, I.S., Truong, J., Filion, P. and McBurney, M.W. 1996. A splice variant of the ITF-2 transcript encodes a transcription factor that inhibits Myo D activity. *J. Biol. Chem.* 271: 3555-3561.
- Chen, B. and Lim, R.W. 1997. Physical and functional interactions between the transcriptional inhibitors Id3 and ITF-2 $\beta$ . Evidence toward a novel mechanism regulating muscle-specific gene expression. *J. Biol. Chem.* 272: 2459-2463.
- Parrinello, S., Lin, C.Q., Murata, K., Itahana, Y., Singh, J., Krtolica, A., Campisi, J. and Desprez, P.Y. 2001. Id, ITF-2, and Id2 comprise a network of helix-loop-helix proteins that regulate mammary epithelial cell proliferation, differentiation, and apoptosis. *J. Biol. Chem.* 276: 39213-39219.

## CHROMOSOMAL LOCATION

Genetic locus: Tcf4 (mouse) mapping to 18 E2.

## PRODUCT

ITF-2 (m): 293T Lysate represents a lysate of mouse ITF-2 transfected 293T cells and is provided as 100  $\mu$ g protein in 200  $\mu$ l SDS-PAGE buffer.

## RESEARCH USE

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

## APPLICATIONS

ITF-2 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive ITF-2 antibodies. Recommended use: 10-20  $\mu$ l per lane.

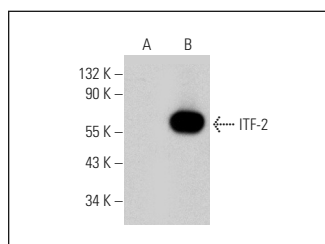
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

ITF-2 (G-8): sc-515325 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse ITF-2 expression in ITF-2 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

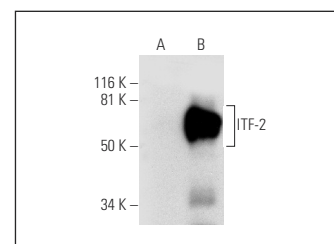
## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG $\kappa$  BP-HRP: sc-516102 or m-IgG $\kappa$  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



ITF-2 (G-8): sc-515325. Western blot analysis of ITF-2 expression in non-transfected: sc-117752 (A) and mouse ITF-2 transfected: sc-121127 (B) 293T whole cell lysates.



ITF-2 (C-1): sc-393255. Western blot analysis of ITF-2 expression in non-transfected: sc-117752 (A) and mouse ITF-2 transfected: sc-121127 (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.

## PROTOCOLS

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