

ITF-2 (N-16): sc-48949

BACKGROUND

Immunoglobulin transcription factor 2 (ITF-2), also designated transcription factor 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 SSTR2-1NR 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 MyoD; alternatively spliced isoforms of ITF-2 function to activate or repress their transcription.

CHROMOSOMAL LOCATION

Genetic locus: TCF4 (human) mapping to 18q21.2; Tcf4 (mouse) mapping to 18 E2.

SOURCE

ITF-2 (N-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of ITF-2 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-48949 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-48949 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ITF-2 (N-16) is recommended for detection of ITF-2 isoforms SEF2-1A and SEF2-1D of human, mouse and, to a lesser extent, rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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).

ITF-2 (N-16) is also recommended for detection of ITF-2 isoforms SEF2-1A and SEF2-1D in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for ITF-2 siRNA (h): sc-61657, ITF-2 siRNA (m): sc-61658, ITF-2 shRNA Plasmid (h): sc-61657-SH, ITF-2 shRNA Plasmid (m): sc-61658-SH, ITF-2 shRNA (h) Lentiviral Particles: sc-61657-V and ITF-2 shRNA (m) Lentiviral Particles: sc-61658-V.

ITF-2 (N-16) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight (predicted) of ITF-2: 71 kDa.

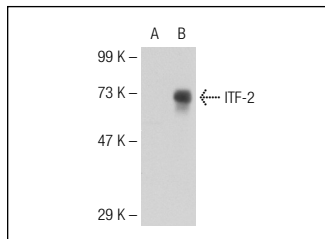
Molecular Weight (observed) of ITF-2: 85 kDa.

Positive Controls: ITF-2 (m): 293T Lysate: sc-121127, A549 cell lysate: sc-2413 or human placenta extract: sc-363772.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



ITF-2 (N-16): sc-48949. 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 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. 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 or our catalog for detailed protocols and support products.

MONOS
Satisfaction
Guaranteed

Try **ITF-2 (C-8): sc-393407** or **ITF-2 (C-1): sc-393255**, our highly recommended monoclonal alternatives to ITF-2 (N-16).