

USF-2 (H-100): sc-28690

BACKGROUND

The ubiquitously expressed cellular upstream stimulatory factor (USF) consists of USF-1 and USF-2 polypeptides which independently exhibit site-specific DNA binding and are members of the c-Myc-related family of regulatory factors containing helix-loop-helix domains. USF also contains a leucine repeat that is required for efficient DNA binding. USF was originally identified as an upstream stimulatory factor that binds the core sequence CACGTG in the adenovirus late promoter. These findings, together with the demonstration of cooperative interaction between USF and the initiator-binding protein, TFII-I, raises the possibility of a more general involvement of USF in transcriptional regulation. While expression of both USF-1 and USF-2 species is ubiquitous, different ratios of USF homo- and heterodimers are found in different cell types.

CHROMOSOMAL LOCATION

Genetic locus: USF2 (human) mapping to 19q13.12; Usf2 (mouse) mapping to 7 B1.

SOURCE

USF-2 (H-100) is a rabbit polyclonal antibody raised against amino acids 91-190 mapping within an internal region of USF-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-28690 X, 200 µg/0.1 ml.

STORAGE

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

APPLICATIONS

USF-2 (H-100) is recommended for detection of USF-2 of mouse, rat and human 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).

USF-2 (H-100) is also recommended for detection of USF-2 in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for USF-2 siRNA (h): sc-36786, USF-2 siRNA (m): sc-36785, USF-2 shRNA Plasmid (h): sc-36786-SH, USF-2 shRNA Plasmid (m): sc-36785-SH, USF-2 shRNA (h) Lentiviral Particles: sc-36786-V and USF-2 shRNA (m) Lentiviral Particles: sc-36785-V.

USF-2 (H-100) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

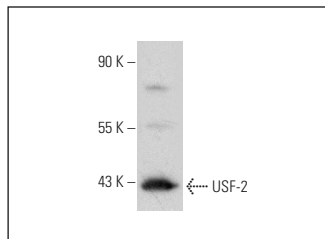
Molecular Weight of USF-2: 44 kDa.

Positive Controls: HeLa nuclear extract: sc-2120, Jurkat nuclear extract: sc-2132 or NIH/3T3 nuclear extract: sc-2138.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



USF-2 (H-100): sc-28690. Western blot analysis of USF-2 expression in NIH/3T3 nuclear extract.

SELECT PRODUCT CITATIONS

1. Ma, Z., et al. 2008. Binding of upstream stimulatory factor 1 to the E-box regulates the 4G/5G polymorphism-dependent plasminogen activator inhibitor 1 expression in mast cells. *J. Allergy Clin. Immunol.* 121: 1006-1012.
2. Ratajowski, M., et al. 2012. Upstream stimulating factors regulate the expression of RORγT in human lymphocytes. *J. Immunol.* 189: 3034-3042.

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 **USF-2 (5E9): sc-293443**, our highly recommended monoclonal alternative to USF-2 (H-100).