# IRF-6 (H-140): sc-98829



The Power to Question

### **BACKGROUND**

Interferon regulatory factor-1 (IRF-1) and IRF-2 have been identified as novel DNA-binding factors that function as regulators of both type I interferon (interferon- $\alpha$  and  $\beta$ ) and interferon-inducible genes. The two factors are structurally related, particularly in their N-terminal regions, which confer DNA binding specificity. In addition, both bind to the same sequence within the promoters of interferon- $\alpha$  and interferon- $\beta$  genes. IRF-1 functions as an activator of interferon transcription, while IRF-2 binds to the same cis elements and represses IRF-1 action. IRF-1 and IRF-2 have been reported to act in a mutually antagonistic manner in regulating cell growth; overexpression of the repressor IRF-2 leads to cell transformation while concomitant overexpression of IRF-1 causes reversion. IRF-1 and IRF-2 are members of a larger family of DNA binding proteins that includes IRF-3, IRF-4, IRF-5, IRF-6, IRF-7, ISGF-3 $\gamma$ , p48 and IFN consensus sequence-binding protein (ICSBP).

### CHROMOSOMAL LOCATION

Genetic locus: IRF6 (human) mapping to 1q32.2; Irf6 (mouse) mapping to 1 H6.

#### **SOURCE**

IRF-6 (H-140) is a rabbit polyclonal antibody raised against amino acids 91-229 mapping within an internal region of IRF-6 of human origin.

## **PRODUCT**

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

### **STORAGE**

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

## **APPLICATIONS**

IRF-6 (H-140) is recommended for detection of IRF-6 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

IRF-6 (H-140) is also recommended for detection of IRF-6 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for IRF-6 siRNA (h): sc-105582, IRF-6 siRNA (m): sc-146286, IRF-6 shRNA Plasmid (h): sc-105582-SH, IRF-6 shRNA Plasmid (m): sc-146286-SH, IRF-6 shRNA (h) Lentiviral Particles: sc-105582-V and IRF-6 shRNA (m) Lentiviral Particles: sc-146286-V.

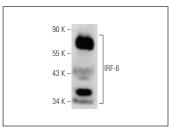
Molecular Weight of IRF-6: 52 kDa.

Positive Controls: Jurkat nuclear extract: sc-2132 or Jurkat whole cell lysate: sc-2204.

#### **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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

### **DATA**



IRF-6 (H-140): sc-98829. Western blot analysis of IRF-6



IRF-6 (H-140): sc-98829. Immunoperoxidase staining of formalin fixed, paraffin-embedded human skin tissue showing cytoplasmic and nuclear staining of keratinocytes, Langerhans cells and melanocytes and nuclear staining of Fibroblasts.

# **SELECT PRODUCT CITATIONS**

 Ratovitski, E.A. 2011. 
<u>ANp63a</u>/IRF6 interplay activates NOS2 transcription and induces autophagy upon tobacco exposure. Arch. Biochem. Biophys. 506: 208-215.

## **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.



Try **IRF-6 (F-12): sc-377043**, our highly recommended monoclonal alternative to IRF-6 (H-140).

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3801 Fax 831.457.3801 Europe +00800 4573 8000 49 6221 4503 0 www.scbt.com