# SANTA CRUZ BIOTECHNOLOGY, INC.

# TNFα-IP 2 (H-654): sc-30138



# BACKGROUND

TNF $\alpha$ -induced protein 2, also known as B94 or TNFAIP2, belongs to the Sec6 family and is differentially expressed in development and capillary tube-like formation *in vitro*. It may play a role as a mediator of inflammation and angiogenesis, and is induced by TNF $\alpha$  and other proinflammatory factors. The B94 gene, originally identified as a tumor necrosis factor  $\alpha$ -inducible gene in endothelial cells, was one of several genes found to be induced by retinoic acid in acute promyelocytic leukemia and other cancers. The TNFAIP2 gene maps to chromosome 14q32.32 encodes a 654 amino acid protein.

# REFERENCES

- Sarma, V., et al. 1992. Cloning of a novel tumor necrosis factor α-inducible primary response gene that is differentially expressed in development and capillary tube-like formation *in vitro*. J. Immunol. 148: 3302-3312.
- 2. Wolf, F.W., et al. 1994. B94, a primary response gene inducible by tumor necrosis factor  $\alpha$ , is expressed in developing hematopoietic tissues and the sperm acrosome. J. Biol. Chem. 269: 3633-3640.
- 3. Rusiniak, M.E., et al. 2000. Identification of B94 (TNFAIP2) as a potential retinoic acid target gene in acute promyelocytic leukemia. Cancer Res. 60: 1824-1829.

# CHROMOSOMAL LOCATION

Genetic locus: TNFAIP2 (human) mapping to 14q32.32; Tnfaip2 (mouse) mapping to 12 F1.

## SOURCE

TNF $\alpha$ -IP 2 (H-654) is a rabbit polyclonal antibody raised against amino acids 1-654 representing full length TNF $\alpha$ -IP 2 of human origin.

#### PRODUCT

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

# **APPLICATIONS**

TNF $\alpha$ -IP 2 (H-654) is recommended for detection of TNF $\alpha$ -IP 2 of human and, to a lesser extent, mouse 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), 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).

Suitable for use as control antibody for TNF $\alpha$ -IP 2 siRNA (h): sc-45826, TNF $\alpha$ -IP 2 siRNA (m): sc-45827, TNF $\alpha$ -IP 2 shRNA Plasmid (h): sc-45826-SH, TNF $\alpha$ -IP 2 shRNA Plasmid (m): sc-45827-SH, TNF $\alpha$ -IP 2 shRNA (h) Lentiviral Particles: sc-45826-V and TNF $\alpha$ -IP 2 shRNA (m) Lentiviral Particles: sc-45827-V.

Molecular Weight of TNFα-IP 2: 73 kDa.

Positive Controls: U-937 cell lysate: sc-2239, K-562 whole cell lysate: sc-2203 or human liver extract: sc-363766.

#### **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<sup>™</sup> compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> 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<sup>™</sup> Mounting Medium: sc-24941. 4) Immuno-histochemistry: use ImmunoCruz<sup>™</sup>: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

# DATA





 $TNF\alpha\text{-IP}$  2 (H-654): sc-30138. Western blot analysis of  $TNF\alpha\text{-IP}$  2 expression in K-562 (A) and AML-193 (B) whole cell lysates and human liver tissue extract (C).

TNF $\alpha$ -IP 2 (H-654): sc-30138. Immunofluorescence staining of methanol-fixed HeLa cells showing cell surface localization (**A**). Immunoperoxidase staining of formalin fixed, paraffin-embedded human urinary bladder tissue showing cytoplasmic staining of urothelial cells (**B**).

#### SELECT PRODUCT CITATIONS

 Verma, N., et al. 2009. Silencing of TNFα receptors coordinately suppresses TNFα expression through NFκB activation blockade in THP-1 macrophage. FEBS Lett. 583: 2968-2974.

## **STORAGE**

Store at 4° C, \*\*D0 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 Satisfation Guaranteed

Try **TNF\alpha-IP 2 (F-6): sc-28318** or **TNF\alpha-IP 2 (C-6): sc-48418**, our highly recommended monoclonal aternatives to TNF $\alpha$ -IP 2 (H-654). Also, for AC, HRP, FITC, PE, Alexa Fluor<sup>®</sup> 488 and Alexa Fluor<sup>®</sup> 647 conjugates, see **TNF\alpha-IP 2 (F-6): sc-28318**.