

# TNF $\alpha$ -IP 2 (C-6): sc-48418

## BACKGROUND

TNF $\alpha$ -induced protein 2 (TNF $\alpha$ -IP 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*. TNF $\alpha$ -IP 2 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 and encodes a 654 amino acid protein.

## REFERENCES

1. Nedwin, G.E., et al. 1985. Human lymphotoxin and tumor necrosis factor genes: structure, homology and chromosomal localization. *Nucleic Acids Res.* 13: 6361-6373.
2. Aggarwal, B.B., et al. 1985. Human tumor necrosis factor. Production, purification, and characterization. *J. Biol. Chem.* 260: 2345-2354.
3. Vilcek, J. and Lee, T.H. 1991. Tumor necrosis factor. New insights into the molecular mechanisms of its multiple actions. *J. Biol. Chem.* 266: 7313-7316.
4. Tartaglia, L.A., et al. 1993. Tumor necrosis factor's cytotoxic activity is signaled by the p55 TNF receptor. *Cell* 73: 213-216.

## CHROMOSOMAL LOCATION

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

## SOURCE

TNF $\alpha$ -IP 2 (C-6) is a mouse monoclonal 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 $_1$  kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

TNF $\alpha$ -IP 2 (C-6) is recommended for detection of TNF $\alpha$ -IP 2 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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) 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.

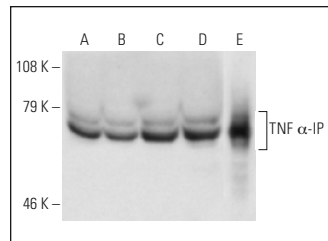
Molecular Weight of TNF $\alpha$ -IP 2: 73 kDa.

Positive Controls: U-937 cell lysate: sc-2239, AML-193 whole cell lysate: sc-364182 or K-562 whole cell lysate: sc-2203.

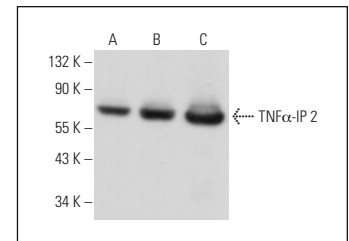
## RECOMMENDED SUPPORT REAGENTS

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™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgG $\kappa$  BP-FITC: sc-516140 or m-IgG $\kappa$  BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

## DATA



TNF $\alpha$ -IP 2 (C-6): sc-48418. Western blot analysis of TNF $\alpha$ -IP 2 expression in U-937 (A), TNF $\alpha$ -induced U-937 (B), K-562 (C), AML-193 (D) and HEK 293 transfected (E) whole cell lysates.



TNF $\alpha$ -IP 2 (C-6): sc-48418. Western blot analysis of TNF $\alpha$ -IP 2 expression in K-562 (A), HeLa (B) and IB4 (C) whole cell lysates.

## SELECT PRODUCT CITATIONS


1. Barzilai, S., et al. 2016. M-sec regulates polarized secretion of inflammatory endothelial chemokines and facilitates CCL2-mediated lymphocyte transendothelial migration. *J. Leukoc. Biol.* 99: 1045-1055.
2. Rui, W., et al. 2016. Preventive activity of banana peel polyphenols on CCl4-induced experimental hepatic injury in Kunming mice. *Exp. Ther. Med.* 11: 1947-1954.
3. Gao, Y., et al. 2021. Autophagy inhibition facilitates wound closure partially dependent on the YAP/IL-33 signaling in a mouse model of skin wound healing. *FASEB J.* 35: e21920.

## 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.



See **TNF $\alpha$ -IP 2 (F-6): sc-28318** for TNF $\alpha$ -IP 2 antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor® 488, 546, 594, 647, 680 and 790.