SANTA CRUZ BIOTECHNOLOGY, INC.

TNFα-IP 2 (F-6): sc-28318

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

TNFα-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 angio-genesis, and is induced by TNFα and other proinflammatory factors. The B94 gene, originally identified as a tumor necrosis factor α-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.

CHROMOSOMAL LOCATION

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

SOURCE

TNFα-IP 2 (F-6) is a mouse monoclonal antibody raised against amino acids 1-654 representing full length Tumor Necrosis Factor α-induced protein 2 of human origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

TNFα-IP 2 (F-6) is available conjugated to agarose (sc-28318 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-28318 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-28318 PE), fluorescein (sc-28318 FITC), Alexa Fluor® 488 (sc-28318 AF488), Alexa Fluor® 546 (sc-28318 AF546), Alexa Fluor® 594 (sc-28318 AF594) or Alexa Fluor® 647 (sc-28318 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-28318 AF680) or Alexa Fluor® 790 (sc-28318 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

TNFα-IP 2 (F-6) is recommended for detection of TNFα-IP 2 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1,000), 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 TNFα-IP 2 siRNA (h): sc-45826, TNFα-IP 2 siRNA (m): sc-45827, TNFα-IP 2 shRNA Plasmid (h): sc-45826-SH, TNFα-IP 2 shRNA Plasmid (m): sc-45827-SH, TNFα-IP 2 shRNA (h) Lentiviral Particles: sc-45826-V and TNFα-IP 2 shRNA (m) Lentiviral Particles: sc-45827-V.

Molecular Weight of TNFα-IP 2: 73 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203, IB4 whole cell lysate: sc-364780 or HeLa whole cell lysate: sc-2200.

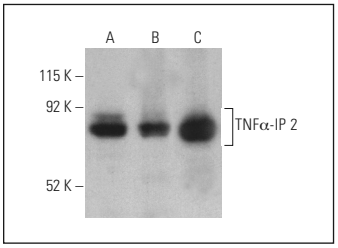
RESEARCH USE

For research use only, not for use in diagnostic procedures.

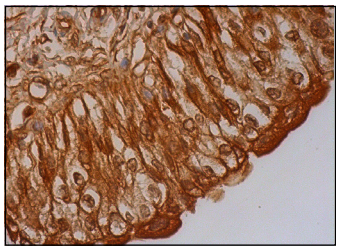
STORAGE

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

DATA



TNFα-IP 2 (F-6) HRP: sc-28318 HRP. Direct western blot analysis of TNFα-IP 2 expression in K-562 (**A**), HeLa (**B**) and IB4 (**C**) whole cell lysates.



TNFα-IP 2 (F-6): sc-28318. Immunoperoxidase staining of formalin fixed, paraffin-embedded human urinary bladder tissue showing membrane, cytoplasmic and nuclear staining of urothelial cells.

SELECT PRODUCT CITATIONS

1. Kondratiev, S., et al. 2011. Aberrant expression of the dendritic cell marker TNFAIP2 by the malignant cells of Hodgkin lymphoma and primary mediastinal large B-cell lymphoma distinguishes these tumor types from morphologically and phenotypically similar lymphomas. Am. J. Surg. Pathol. 35: 1531-1539.
2. Chen, F., et al. 2023. β2-Microglobulin exacerbates neuroinflammation, brain damage, and cognitive impairment after stroke in rats. Neural Regen. Res. 18: 603-608.
3. Xu, T., et al. 2023. TNFAIP2 confers cisplatin resistance in head and neck squamous cell carcinoma via KEAP1/NRF2 signaling. J. Exp. Clin. Cancer Res. 42: 190.
4. Fang, H., et al. 2023. Integrin β4 promotes DNA damage-related drug resistance in triple-negative breast cancer via TNFAIP2/IQGAP1/RAC1. Elife 12: RP88483.
5. Qiao, X., et al. 2024. Beyond mitochondrial transfer, cell fusion rescues metabolic dysfunction and boosts malignancy in adenoid cystic carcinoma. Cell Rep. 43: 114652.
6. Mansour, S.M., et al. 2024. Novel insights into gut health: Cilostazol strengthens gut integrity by adjusting TLR-2/NFκB/IL-23 and CD44/AKT/GSK-3β/cyclin-D1 trajectories in methotrexate-induced mucositis model. Eur. J. Pharmacol. 975: 176669.
7. Ren, W., et al. 2024. TNFAIP2 promotes HIF1α transcription and breast cancer angiogenesis by activating the Rac1-ERK-AP1 signaling axis. Cell Death Dis. 15: 821.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.