**BACKGROUND**

Tristetraprolin (TTP), also known as Nup475 and TIS11, is a zinc-binding protein encoded by the immediate-early response gene, Zfp-36. Stimulation of quiescent fibroblasts by mitogens, including platelet derived growth factor and fibroblast growth factor, results in the serine phosphorylation of TTP and the rapid redistribution of the protein from the nucleus to the cytoplasm. In *vivo* studies have demonstrated that TTP is phosphorylated by p42 MAP kinase, indicating that the activity of TTP may be regulated by the MAP kinase pathway *in vivo*. Knockout mice deficient in TTP develop autoimmune, inflammatory arthritis and dermatitis. These conditions can be reversed by blocking the activity of the inflammatory mediator, tumor necrosis factor-α (TNF-α), suggesting that TTP may function to negatively regulate the expression of TNF-α.

**CHROMOSOMAL LOCATION**

Genetic locus: ZF36 (human) mapping to 19q13.2; Zfp36 (mouse) mapping to 7 A3.

**SOURCE**

TTP (A-8) is a mouse monoclonal antibody raised against amino acids 166-285 mapping near the C-terminus of TTP of human origin.

**PRODUCT**

Each vial contains 200 µg IgG2α kappa light chain in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

TTP (A-8) is available conjugated to agarose (sc-374305 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-374305 HRP), 200 µg/ml, for WB, IHC(p) and ELISA; to either phycoerythrin (sc-374305 PE), fluorescein (sc-374305 FITC), Alexa Fluor® 488 (sc-374305 AF488), Alexa Fluor® 546 (sc-374305 AF546), Alexa Fluor® 594 (sc-374305 AF594) or Alexa Fluor® 647 (sc-374305 AF647), 200 µg/ml, for WB (RGB), IF, IHC(p) and FCM; and to either Alexa Fluor® 680 (sc-374305 AF680) or Alexa Fluor® 790 (sc-374305 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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**APPLICATIONS**

TTP (A-8) is recommended for detection of TTP of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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 TTP siRNA (h): sc-36760, TTP siRNA (m): sc-6761, TTP shRNA Plasmid (h): sc-36760-SH, TTP shRNA Plasmid (m): sc-36761-SH, TTP shRNA (h) Lentiviral Particles: sc-36760-V and TTP shRNA (m) Lentiviral Particles: sc-36761-V.

Molecular Weight of TTP: 44 kDa.

Positive Controls: RAW 309 Cr.1 cell lysate: sc-3814, K-562 whole cell lysate: sc-2203 or A-431 whole cell lysate: sc-2201.

**RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended:

1. Western Blotting: use m-IgGx BP-HRP: sc-516102 or m-IgGx 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-IgGx BP-FITC: sc-516140 or m-IgGx BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgGx BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

**DATA**

**SELECT PRODUCT CITATIONS**


**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.