**BACKGROUND**

TIGAR (TP53 tumor protein 53)-induced glycolysis and apoptosis regulator, also known as C12orf5, is a 270 amino acid protein induced by the p53 tumor suppressor pathway that functions to protect against oxidative stress. TIGAR shares sequence similarity with the bisphosphate domain of the fructose-2,6-bisphosphate degrading enzyme (fructose bisphosphatase or FBPase) of the glycolysis pathway and can thus lower the intracellular levels of fructose-2,6-bisphosphate. TIGAR specifically functions to block glycolysis, leading the pathway to the pentose phosphate shunt and decreasing the intracellular concentration of reactive oxygen species. This suggests a role for TIGAR in protecting cells from reactive oxygen species that can be DNA damaging and lead to apoptosis.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: TIGAR (human) mapping to 12p13.32; Tigar (mouse) mapping to 6 F3.

**SOURCE**

TIGAR (E-2) is a mouse monoclonal antibody raised against amino acids 61-269 mapping at the C-terminus of TIGAR of mouse origin.

**PRODUCT**

Each vial contains 200 µg IgG2b kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

TIGAR (E-2) is available conjugated to agarose (sc-166290 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-166290 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-166290 PE), fluorescein (sc-166290 FITC), Alexa Fluor® 488 (sc-166290 AF488), Alexa Fluor® 546 (sc-166290 AF546), Alexa Fluor® 594 (sc-166290 AF594) or Alexa Fluor® 647 (sc-166290 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-166290 AF680) or Alexa Fluor® 790 (sc-166290 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

**STORAGE**

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

**APPLICATIONS**

TIGAR (E-2) is recommended for detection of TIGAR 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 TIGAR siRNA (h): sc-76662, TIGAR siRNA (m): sc-76663, TIGAR shRNA Plasmid (h): sc-76662-SH, TIGAR shRNA Plasmid (m): sc-76663-SH, TIGAR shRNA (h) Lentiviral Particles: sc-76662-V and TIGAR shRNA (m) Lentiviral Particles: sc-76663-V.

Molecular Weight of TIGAR: 30 kDa.

Positive Controls: Saos-2 cell lysate: sc-2235, Hep G2 cell lysate: sc-2227 or Jurkat whole cell lysate: sc-2204.

**DATA**

**SELECT PRODUCT CITATIONS**


**PROTOCOLS**

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