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Datasheet for 600-401-FE4

TIGAR Antibody

Overview

Description:	Anti-TIGAR (RABBIT) Antibody - 600-401-FE4
Item No.:	600-401-FE4
Size:	100 µg
Applications:	ELISA, IHC, WB
Reactivity:	Human, Mouse, Rat
Host Species:	Rabbit

Product Details

Background:	The p53 tumor-suppressor gene integrates numerous signals that control cell life and death; loss of its functions contributes to the development of most cancers. Recent studies have demonstrated the ability of p53 to regulate the expression of several proteins involved in glycolysis and oxidative phosphorylation, such as TIGAR, SCO2, and phosphoglycerate mutase. TIGAR is a recently discovered protein that functions to regulate glycolysis and protect cells against oxidative stress. TIGAR is similar in structure to proteins in the phosphoglycerate mutase family, most notably 6-phosphofructo-2-kinase, suggesting TIGAR may function as a fructose bisphosphatase. Expression of TIGAR in transfected cells correlated with an inhibition of glycolysis and decreased levels of reactive oxygen species and p53-induced apoptosis, indicating that TIGAR may act to modulate the apoptotic response to p53, thereby allowing cells to survive mild or transient stresses.
Synonyms:	TIGAR Antibody, FR2BP, TIGAR, C12orf5, Fructose-2, 6-bisphosphatase TIGAR, TP53-induced glycolysis and apoptosis regulator
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	TIGAR
Reactivity:	Human, Mouse, Rat

Immunogen Type:	Conjugated Peptide
Immunogen:	Anti-TIGAR antibody was prepared from whole rabbit serum produced by repeated immunizations with a 18 amino acid synthetic peptide from near the internal region of human TIGAR.
Purity/Specificity:	Anti-TIGAR Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. Cross reactivity with TIGAR from other sources has not been determined.
Relevant Links:	• UniProtKB - Q9NQ88 • GeneID - 57103 • NCBI - NP_065108.1

Application Details

Tested Applications:	ELISA, IHC, WB
Application Note:	Anti-TIGAR Antibody has been tested for use in ELISA, Western Blotting, and Immunohistochemistry. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 30 kDa in Western Blots of specific cell lysates and tissues.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:5000 - 1:20,000
IHC:	2.5 µg/mL
WB:	0.5-2 µg/mL

Formulation

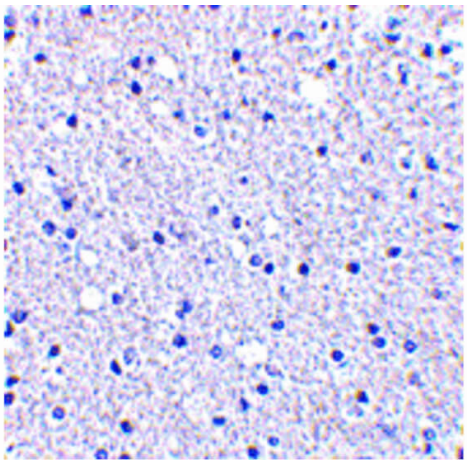
Physical State:	Liquid (sterile filtered)
Concentration:	1 mg/mL by UV absorbance at 280 nm
Buffer:	0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

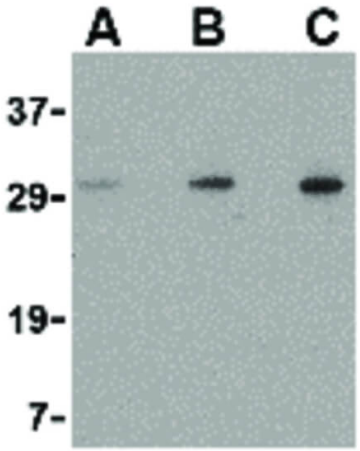
Shipping Condition:	Dry Ice

Storage Condition:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



Immunohistochemistry
Immunohistochemistry of TIGAR antibody. Tissue: Human brain tissue. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: TIGAR antibody at 2.5 µg/mL for 1 h at RT. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: TIGAR is cytoplasmic. Staining: TIGAR as precipitated red signal with hematoxylin purple nuclear counterstain.



Western Blot
Western Blot of TIGAR antibody. Lane A: EL4 cell lysate at 0.5 µg/mL. Lane B: EL4 cell lysate at 1 µg/mL. Lane C: EL4 cell lysate at 2 µg/mL. Load: 35 µg per lane. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 14.9 kDa, ~30 kDa for TIGAR.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.