

TIGAR (IN1) antibody (pAb)

Rabbit Anti-Human/Mouse/Rat TIGAR (IN1)

Instruction Manual

Catalog Number	PK-AB718-4049
Synonyms	TIGAR Antibody: Tp53-induced glycolysis and apoptosis regulator
Description	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.
Quantity	100 µg
Source / Host	Rabbit
Immunogen	TIGAR antibody was raised in rabbits against an 18 amino acid peptide from near the center of human TIGAR.
Purification Method	Affinity chromatography purified via peptide column.
Clone / IgG Subtype	Polyclonal antibody
Species Reactivity	Human, Mouse, Rat
Specificity	
Formulation	Antibody is supplied in PBS containing 0.02% sodium azide.
Reconstitution	During shipment, small volumes of antibody will occasionally become entrapped in the seal of the product vial. For products with volumes of 200 µl or less, we recommend gently tapping the vial on a hard surface or briefly centrifuging the vial in a tabletop centrifuge to dislodge any liquid in the container's cap.
Storage & Stability	Antibody can be stored at 4°C for three months and at -20°C for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Applications	E, WB, IHC Note: Antibody might be suitable for other applications not tested so far. Optimal concentrations for each application have to be determined individually. TIGAR antibody can be used for detection of TIGAR by Western blot at 0.5 - 2 µg/mL. Antibody can also be used for immunohistochemistry starting at 2.5 µg/mL.
Images	Available upon request.
References	Guimaraes DP and Hainaut P. TP53: a key gene in human cancer. <i>Biochimie</i> 2002; 84:83-93. Corcoran CA, Huang Y, and Sheikh MS. The regulation of energy generating pathways by p53. <i>Cancer Biol. Ther.</i> 2006; 5:1610-3. Bensaad K, Tsuruta A, Selak MA, et al. TIGAR, a p53-inducible regulator of glycolysis and apoptosis. <i>Cell</i> 2006; 126:107-20.
Images	Available upon request.
Related Products	Cat.No. PK-AB718-4049P; TIGAR Peptide Cat.No. PK-AB718-1287; EL4 Cell Lysate

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