



# TIGAR Polyclonal Antibody

<b>Catalog No</b>	BYab-07843
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Rat;Mouse;
<b>Applications</b>	WB;ELISA
<b>Gene Name</b>	TIGAR C12orf5
<b>Protein Name</b>	Fructose-2,6-bisphosphatase TIGAR (EC 3.1.3.46) (TP53-induced glycolysis and apoptosis regulator)
<b>Immunogen</b>	Synthesized peptide derived from part region of human protein
<b>Specificity</b>	TIGAR Polyclonal Antibody detects endogenous levels of protein.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, and 0.02% sodium azide.
<b>Source</b>	Polyclonal, Rabbit,IgG
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Dilution</b>	WB 1:500-2000 ELISA 1:5000-20000
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	
<b>Observed Band</b>	29kD
<b>Cell Pathway</b>	Cytoplasm . Nucleus . Mitochondrion . Translocated to the mitochondria during hypoxia in a HIF1A-dependent manner (PubMed:23185017). Colocalizes with HK2 in the mitochondria during hypoxia (PubMed:23185017). Translocated to the nucleus during hypoxia and/or genome stress-induced DNA damage responses in cancer cells (PubMed:25928429). Translocation to the mitochondria is enhanced in ischemic cortex after reperfusion and/or during oxygen and glucose deprivation (OGD)/reoxygenation insult in primary neurons (By similarity). .
<b>Tissue Specificity</b>	Expressed in the brain (PubMed:22887998). Expressed in breast tumors (PubMed:21820150). Expressed in glioblastomas (PubMed:22887998).
<b>Function</b>	catalytic activity:Beta-D-fructose 2,6-bisphosphate + H(2)O = D-fructose 6-phosphate + phosphate.,caution:Not expected to have any kinase activity.,function:Probable fructose-biphosphatase. Lowers cellular levels of fructose 2,6-bisphosphate. Protects cells against reactive oxygen species and against apoptosis induced by tp53.,induction:Rapidly up-regulated by TP53.,PTM:Phosphorylated upon DNA damage, probably by ATM or

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ATR.,similarity:Belongs to the phosphoglycerate mutase family.,

### Background

This gene is regulated as part of the p53 tumor suppressor pathway and encodes a protein with sequence similarity to the bisphosphate domain of the glycolytic enzyme that degrades fructose-2,6-bisphosphate. The protein functions by blocking glycolysis and directing the pathway into the pentose phosphate shunt. Expression of this protein also protects cells from DNA damaging reactive oxygen species and provides some protection from DNA damage-induced apoptosis. The 12p13.32 region that includes this gene is paralogous to the 11q13.3 region. [provided by RefSeq, Jul 2008],

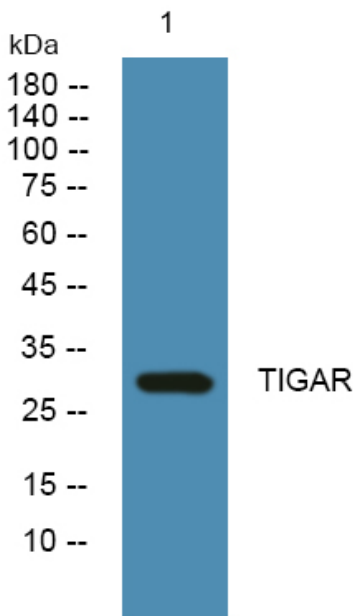
### matters needing attention

Avoid repeated freezing and thawing!

### Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

## Products Images



Western blot analysis of lysates from KB cells, primary antibody was diluted at 1:1000, 4° over night