

# TIGAR, human recombinant

**CATALOG #:** 7217-10 10 µg  
7217-50 50 µg

**ALTERNATE NAMES:** TP53-induced glycolysis and apoptosis regulator (TIGAR)

**SOURCE:** E. Coli

**PURITY:** ≥ 95% by SDS-PAGE gel and HPLC analyses

**MOL. WEIGHT:** 29.9 kDa

**ENDOTOXIN LEVEL:** < 0.1 ng/µg of protein (<1 EU/µg).

**FORM:** Lyophilized

**FORMULATION:** Sterile filtered through a 0.2 micron filter. Lyophilized from 20 mM Tris, pH 8.0, 200 mM NaCl and 1 mM DTT

**STORAGE CONDITIONS:** Store at -20°C. After reconstitution, aliquot and store at -20°C to -80°C. Avoid repeated freezing and thawing cycles.

**RECONSTITUTION:** Centrifuge the vial prior to opening. Reconstitute in water to a concentration of 0.5-1.0 mg/ml. Do not vortex. This solution can be stored at 2-8°C for up to 1 week. For extended storage, it is recommended to further dilute in a buffer containing a carrier protein (example 0.1% BSA) and store in working aliquots at -20°C to -80°C.

**DESCRIPTION:** TIGAR is a p53-inducible enzyme that catalyzes the hydrolysis of fructose-2-6 bisphosphate (F-2-6-BP) to fructose-6-phosphate and inorganic phosphate. F-2-6-BP is a powerful activator of 6-phosphofructose-1 kinase, the rate limiting enzyme of glycolysis. By lowering the intracellular level of F-2-6-BP, TIGAR expression leads to increased glucose processing via the pentose phosphate pathway, the major cellular source for NADPH. Recombinant human TIGAR expressed in E. coli is a 29.9 kDa protein containing 269 amino-acid residues.

**AMINO ACID SEQUENCE:**

ARFALTVVRH	GETRFNKEKI	IQGGVDEPL	SETGFKQAAA	AGIFLNNVKF
THAFSSDLMR	TKQTMHGILE	RSKFCKDMTV	KYDSRLRERK	YGVVEGKALS
ELRAMAKAAR	EECPVFTPPG	GETLDQVKMR	GIDFFFLCQ	LILKEADQKE
QFSQGSPSNC	LETSLAEIFP	LGKNHSSKVN	SDSGIPGLAA	SVLVVSHGAY
MRSFLDYFLT	DLKCSLPATL	SRSEMSVTP	NTGMSLFIIN	FEEGREVKPT
VQCICMNLQD	HLNGLTETR			

**RELATED PRODUCTS:**

- TIGAR-TAT, human recombinant (**Cat. No. 7218-10, -50**)
- Fructose Colorimetric/Fluorometric Assay Kit (**Cat. No. K619-100**)
- PicoProbe™ Fructose Fluorometric Assay Kit (**Cat. No. K611-100**)
- PicoProbe™ Fructose-6-Phosphate Fluorometric Assay Kit (**Cat. No. K689-100**)

**FOR RESEARCH USE ONLY! Not to be used in humans.**

