10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

TIGAR-TAT, human recombinant protein

TP53-induced glycolysis and apoptosis regulator (TIGAR)
Catalog # PBV10848r

Specification

TIGAR-TAT, human recombinant protein - Product info

Primary Accession	Q9NQ88
Calculated MW	**31.6 kDa KDa**

TIGAR-TAT, human recombinant protein - Additional Info

Gene ID	**57103**
Gene Symbol	**TIGAR**

Other Names
TP53-induced glycolysis and apoptosis regulator (TIGAR)

Gene Source	**Human**
Source	**E. Coli**
Assay&Purity	**SDS-PAGE; ≥95%**
Assay2&Purity2	**HPLC;**
Recombinant	**Yes**
Sequence	**ARFALTVVRH GETRFNKEKI IQGQGVDEPL SETGFKQAAA AGIFLNNVKF THAFSSDLMR TKQTMHGILE RSKFCKDMTV KYDSRLRERK YGVVEGKALS ELRAMAKAAR EECPVFTPPG GETLDQVKMR GIDFFEFLCQ LILKEADQKE QFSQGSPSNC LETSLAEIFP LGKNHSSKVN SDSGIPGLAA SVLVVSHGAY MRSLFDYFLT DLKCSLPATL SRSELMSVTP NTGMSLFIIN FEEGREVKPT VQCICMNLQD HLNGLTETRG GGYGRKKRRQ RRR**

Target/Specificity
TIGAR

Application Notes
Centrifuge the vial prior to opening. Reconstitute in water to a concentration of 0.1-1.0 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.

Format
Lyophilized powder

Storage
-20°C; Sterile filtered through a 0.2 micron filter. Lyophilized from 10 mM Sodium Phosphate, pH 7.5.

TIGAR-TAT, human recombinant protein - Protocols

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Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

TIGAR-TAT, human recombinant protein - Images

TIGAR-TAT, human recombinant protein - Background

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. Protein transduction using TAT fusion proteins represents an alternative methodology for introducing transcription factors and other intracellular proteins into primary as well as transformed cells. Recombinant human TIGAR-TAT expressed in E. coli is a 31.6 kDa protein containing 283 amino-acid residues, including the 269 residues of full-length TIGAR fused to a 14-residue C-terminal peptide containing the TAT transduction domain (GGGYGRKKRRQRRR).

TIGAR-TAT, human recombinant protein - References

White K.E.,et al.Nat. Genet. 26:345-348(2000).
Cheng J.,et al.Submitted (SEP-2003) to the EMBL/GenBank/DDBJ databases.
Ota T.,et al.Nat. Genet. 36:40-45(2004).
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Bensaad K.,et al.Cell 126:107-120(2006).