

### **Recombinant Human TIGAR-TAT**

Catalog # PBG10447

# Specification

#### Recombinant Human TIGAR-TAT - Product Information

#### Recombinant Human TIGAR-TAT - Additional Information

### **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. 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 <em>E. coli</em> 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).

## **Biological**Activity

Pretreatment with TIGAR-TAT for 4 hrs, using a concentration range 0.1-5.0  $\mu$ g/ml, protects U2OS cells from apoptosis induced by hydrogen peroxide.

### **Authenticity**

Verified by N-terminal and Mass Spectrometry analyses (when applicable).

#### Endotoxin

Endotoxin level is <0.1 ng/  $\mu g$  of protein ( $<1EU/ \mu g$ ).

## **Protein Content**

Verified by UV Spectroscopy and/or SDS-PAGE gel.

## **Storage**

-20°C

# **Precautions**

Recombinant Human TIGAR-TAT is for research use only and not for use in diagnostic or therapeutic procedures.

### **Recombinant Human TIGAR-TAT - Protocols**

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry





• <u>Immunofluorescence</u>

- Immunoprecipitation
- Flow Cytomety
- Cell Culture

**Recombinant Human TIGAR-TAT - Images**