

## 32-20232: Recombinant Human TIGAR-TAT(Discontinued)

**Alternative Name :** TP53-induced glycolysis and apoptosis regulator (TIGAR)

### Description

**Source:**E.coli

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).

### Product Info

**Amount :** 5 µg / 25 µg

**Purification :** Purity: >= 95% by SDS-PAGE gel and HPLC analyses.

**Amino Acid :** ARFALTVVRH GETRFNKEKI IQGQGVDEPL SETGFKQAAA AGIFLNNVKF THAFSSDLMR TKQTMHGILE  
RSKFCKDMTV KYDSRLRERK YGVVEGKALS ELRAMAKAAR EECPVFTPPG GETLDQVKMR GIDFFEFLCQ  
LILKEADQKE QFSQGSPSNC LETSLAEIFP LGKNHSSKVN SDSGIPGLAA SVLVVSHGAY MRSLFDYFLT  
DLKCSLPATL SRSELM SVTP NTGMSLFIIN FEEGREVKPT VQCICMNLQD HLNGLTETRG GGYGRKKRRQ  
RRR

### Application Note

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