



# Recombinant Human TIGAR

20150227BB



**FOR RESEARCH ONLY! NOT FOR HUMAN USE!**

<b>Cat.-no.:</b>	<b>100-429</b>
<b>Size:</b>	25 µg
<b>Lot. No.:</b>	According to product label

## Scientific Background

<b>Gene-ID (NCBI):</b>	57103
<b>Synonyms:</b>	TP53-induced glycolysis and apoptosis regulator

TIGAR is a p53-inducible enzyme that catalyzes the hydrolysis of fructose-2-6 biphosphate (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.

## Sequence

```
ARFALTVVRH GETRFNKEKI IQQGVDPEL SETGFKQAAA  
AGIFLNNVKF THAFSSDLMR TKQTMHGILE RSKFCKDMTV  
KYDSRLRERK YGVVEGKALS ELRAMAKAAR EECPVFTPPG  
GETLDQVKMR GIDFFEFLLCQ LILKEADQKE QFSQGSFSNC  
LETSLAEIFP LGKNHSSKVN SDSGIPGLAA SVLVVSHGAY  
MRSFLFDYFLT DLKCSLPATL SRSELMVTP NTGMSLFIIN  
FEEGREVKPT VQCICMNLQD HLNGLTETR
```

## Database References

<b>Protein RefSeq:</b>	NP_065108
<b>Uniprot ID:</b>	Q9NQ88
<b>mRNA RefSeq:</b>	NM_020375

## Product Specifications

<b>Expressed in</b>	E. coli
<b>Purity</b>	> 95% by SDS-PAGE & HPLC analyses
<b>Endotoxin level</b>	< 0.1 ng /µg of protein (<1EU/µg).
<b>Formulation</b>	lyophilized
<b>Length (aa):</b>	269
<b>MW:</b>	29.9 kDa

**Biological Activity:** Data not available.



**AVOID REPEATED FREEZE AND THAW CYCLES!**