

# Recombinant Human TP53-induced Glycolysis and Apoptosis Regulator (rHuTIGAR)

## PrimeGene Technical Data Sheet

---

<b>Catalog Number:</b>	401-16
<b>Source:</b>	<i>Escherichia coli</i> .
<b>Molecular Weight:</b>	Approximately 30.1 kDa, a single non-glycosylated polypeptide chain containing 270 amino acids.
<b>Quantity:</b>	5µg/25µg/1000µg
<b>AA Sequence:</b>	MARFALTVVVR HGETRFNKEK IIQGQGVDEP LSETGFKQAA AAGIFLNNVK FTHAFSSDLM RTKQTMHGIL ERSKFCKDMT VKYDSRLRER KYGVVEGKAL SELRAMAKAA REECPVFTPP GGETLDQVKM RGIDFFEFLC QLILKEADQK EQFSQGPSN CLETSLAEIF PLGKNHSSKV NSDSGIPGLA ASVLVVSHTA YMRSLFDYFL TDLKCSLPAT LSRSELMSTV PNTGMSLFII NFEEGREGVKP TVQCICMNLQ DHLNGLTETR
<b>Purity:</b>	> 95 % by SDS-PAGE and HPLC analyses.
<b>Biological Activity:</b>	Data not available.
<b>Physical Appearance:</b>	Sterile Filtered White lyophilized (freeze-dried) powder.
<b>Formulation:</b>	Lyophilized from a 0.2 µm filtered concentrated solution in 20 mM Tris-HCl, pH8.5, 150 mM NaCl.
<b>Endotoxin:</b>	Less than 0.1 EU/µg of rHuTIGAR as determined by LAL method.
<b>Reconstitution:</b>	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/ml. Stock solutions should be apportioned into working aliquots and stored at ≤ -20 °C. Further dilutions should be made in appropriate buffered solutions.
<b>Shipping:</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
<b>Stability &amp; Storage:</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"><li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li><li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li><li>● 3 months, -20 to -70 °C under sterile conditions after reconstitution.</li></ul>
<b>Usage:</b>	This material is offered by Shanghai PrimeGene Bio-Tech for research, laboratory or further evaluation purposes. <b>NOT FOR HUMAN USE.</b>

---

### ***Human TP53-induced Glycolysis and Apoptosis Regulator***

The TP53-inducible glycolysis and apoptosis regulator (TIGAR), also named fructose-2, 6-bisphosphatase TIGAR, is an enzyme that in humans is encoded by the C12orf5 gene. The protein functions by blocking glycolysis and directing the pathway into the pentose phosphate shunt. Expression of this protein also protects cells from DNA damaging reactive oxygen species and provides some protection from DNA damage-induced apoptosis. TIGAR activity can have multiple cellular effects. Recombinant human TIGAR expressed in *E. coli* is a 30.1 kDa protein containing 270 amino-acid residues.