

TIGAR, human recombinant protein
TP53-induced glycolysis and apoptosis regulator (TIGAR)
Catalog # PBV10847r**Specification**

TIGAR, human recombinant protein - Product info

Primary Accession [O9NQ88](#)
Calculated MW **29.9 kDa KDa**

TIGAR, 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 SRSELMSTVP NTGMSLFIIN
FEEGREVKPT VQCICMNLQD HLNGLTETR

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 20 mM Tris, pH 8.0, 200 mM NaCl and 1 mM DTT

TIGAR, human recombinant protein - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

TIGAR, human recombinant protein - Images

TIGAR, 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. Recombinant human TIGAR expressed in E. coli is a 29.9 kDa protein containing 269 amino-acid residues.

TIGAR, 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).
Mural R.J., et al. Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.
Bensaad K., et al. Cell 126:107-120(2006).