

Anti-TIGAR [M2-P4H2]

Catalogue number: 151870

Sub-type: Primary antibody

Images:

Contributor

Inventor: Ayham Alnabulsi

Institute: Vertebrate Antibodies Limited

Images:

Tool details

***FOR RESEARCH USE ONLY**

Name: Anti-TIGAR [M2-P4H2]

Alternate name:

Class: Monoclonal

Conjugate: Unconjugated

Description: TIGAR (TP53 (tumor protein 53)-induced glycolysis and apoptosis regulator), also known as C12orf5, is a 270 amino acid protein induced by the p53 tumor suppressor pathway that functions to protect against oxidative stress. TIGAR shares sequence similarity with the bisphosphate domain of the fructose- 2,6-bisphosphate degrading enzyme (fructose bisphosphatase or FBPase) of the glycolysis pathway and can thus lower the intracellular levels of fructose- 2,6-bisphosphate. TIGAR specifically functions to block glycolysis, leading the pathway to the pentose phosphate shunt and decreasing the intracellular concentration of reactive oxygen species. This suggests a role for TIGAR in protecting cells from reactive oxygen species that can be DNA damaging and lead to apoptosis.

Purpose:

Parental cell:

Organism:

Tissue:

Model:

Gender:

Isotype: IgG1 kappa

Reactivity: Human

Selectivity:

Host: Mouse

Immunogen: Synthetic peptide; IINFEEGREV (amino acids 239-248)

Immunogen UNIPROT ID:

Sequence:

Growth properties:

Production details:

Formulation:

Recommended controls: ELISA- peptide immunogen Western Blot- Hela Whole cell extract IF- Hela cells IHC- Human colon carcinoma

Bacterial resistance:

Selectable markers:

Additional notes:

Target details

Target: TP53-induced glycolysis and apoptosis regulator (TIGAR)

Target alternate names:

Target background: TIGAR (TP53 (tumor protein 53)-induced glycolysis and apoptosis regulator), also known as C12orf5, is a 270 amino acid protein induced by the p53 tumor suppressor pathway that functions to protect against oxidative stress. TIGAR shares sequence similarity with the bisphosphate domain of the fructose-2,6-bisphosphate degrading enzyme (fructose bisphosphatase or FBPase) of the glycolysis pathway and can thus lower the intracellular levels of fructose-2,6-bisphosphate. TIGAR specifically functions to block glycolysis, leading the pathway to the pentose phosphate shunt and decreasing the intracellular concentration of reactive oxygen species. This suggests a role for TIGAR in protecting cells from reactive oxygen species that can be DNA damaging and lead to apoptosis.

Molecular weight:

Ic50:

Applications

Application: ELISA ; IHC ; IF ; WB

Application notes:

Handling

Format: Liquid

Concentration: 1 mg/ml

Passage number:

Growth medium:

Temperature:

Atmosphere:

Volume:

Storage medium:

Storage buffer: PBS with 0.02% azide

Storage conditions: -15° C to -25° C

Shipping conditions:

Shipping at 4° C

Related tools

Related tools:

References

References: Brown et al. 2014. PLoS One. 9(3):e90776. PMID: 24608339. ; The expression and prognostic significance of retinoic acid metabolising enzymes in colorectal cancer.

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