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TCTP Antibody

Store at -20C
#8441

For Research Use Only. Not for Use in Diagnostic Procedures.

Applications: W	Reactivity: H M R Mk	Sensitivity: Endogenous	MW (kDa): 23	Source/Isotype: Rabbit	UniProt ID: #P13693	Entrez-Gene Id: 7178
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Product Usage Information

Application

Western Blotting

Dilution

1:1000

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

Specificity/Sensitivity

TCTP Antibody recognizes endogenous levels of total TCTP protein.

Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues near the carboxy terminus of human TCTP protein. Antibodies are purified by protein A and peptide affinity chromatography.

Background

Translationally controlled tumor protein (TCTP/p23/HRF) is a ubiquitously expressed and highly conserved protein involved in various cellular processes, such as its role as a histamine releasing factor in chronic allergic disease (1). TCTP binds tubulin in a cell cycle dependent manner and is associated with the mitotic spindle (2). In addition, TCTP interacts with the actin cytoskeleton to regulate cell shape (3). In mitosis, TCTP is phosphorylated by PLK at Ser46, decreasing microtubule stability (4,5). TCTP interacts with the small GTPase Rheb, possibly acting as a GEF, thereby activating the TORC1 pathway and controlling cell growth and proliferation (6,7). TCTP has also been shown to be involved in apoptosis and cell stress (8-11). In cultured cells, reduction in TCTP expression can cause loss of the malignant phenotype (12).

Background References

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- Dephoure, N. et al. (2008) *Proc Natl Acad Sci USA* 105, 10762-7.
- Dong, X. et al. (2009) *J Biol Chem* 284, 23754-64.
- Hsu, Y.C. et al. (2007) *Nature* 445, 785-8.
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- Gnanasekar, M. et al. (2009) *Biochem Biophys Res Commun* 386, 333-7.
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Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

W: Western Blotting

Cross-Reactivity Key

H: Human **M:** Mouse **R:** Rat **Mk:** Monkey

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