

#5251 Store at -20°C

Phospho-TCTP (Ser46) Antibody

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

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source:	UniProt ID:	Entrez-Gene Id:
WB, IHC-P, IF-IC, FC-FP	H M R Mk	Endogenous	23	Rabbit	#P13693	7178

Product Usage Information

Application

Dilution

Western Blotting	1:1000
Immunohistochemistry (Paraffin)	1:100
Immunofluorescence (Immunocytochemistry)	1:100
Flow Cytometry (Fixed/Permeabilized)	1:50

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

Phospho-TCTP (Ser46) Antibody recognizes endogenous levels TCTP protein only when phosphorylated at Ser46. In some cell types the antibody may recognize an 80-100 kDa protein of unknown origin.

Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic phosphopeptide corresponding to residues surrounding Ser46 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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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

WB: Western Blotting **IHC-P:** Immunohistochemistry (Paraffin)
IF-IC: Immunofluorescence (Immunocytochemistry) **FC-FP:** Flow Cytometry (Fixed/Permeabilized)

Cross-Reactivity Key

H: human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **Mi:** mink **C:** chicken **Dm:** D. melanogaster
X: Xenopus **Z:** zebrafish **B:** bovine **Dg:** dog **Pg:** pig **Sc:** S. cerevisiae **Ce:** C. elegans **Hr:** horse
GP: Guinea Pig **Rab:** rabbit **All:** all species expected

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