

## Product datasheet for **TA343797**

### Malignant T cell amplified sequence 1 (MCTS1) Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	WB
Recommended Dilution:	WB
Reactivity:	Human
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	The immunogen for anti-MCTS1 antibody: synthetic peptide directed towards the N terminal of human MCTS1. Synthetic peptide located within the following region: MFKKFDEKENVSNCIQLKTSVIKGIKNQLIEQFPGIWPWNQIMPKKDPV
Formulation:	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose. <i>Note that this product is shipped as lyophilized powder to China customers.</i>
Purification:	Affinity Purified
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	20 kDa
Gene Name:	malignant T-cell amplified sequence 1
Database Link:	<a href="#">NP_054779</a> <a href="#">Entrez Gene 28985 Human</a> <a href="#">Q9ULC4</a>



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**Background:**

MCTS1 is an anti-oncogene that play a role in cell cycle regulation; decreases cell doubling time and anchorage-dependent growth; shortens the duration of G1 transit time and G1/S transition. When constitutively expressed, MCTS1 increases CDK4 and CDK6 kinases activity and CCND1/cyclin D1 protein level, as well as G1 cyclin/CDK complex formation. MCTS1 plays a role as translation enhancer; and recruits the density-regulated protein/DENR and binds to the cap complex of the 5'-terminus of mRNAs, subsequently altering the mRNA translation profile; MCTS1 up-regulates protein levels of BCL2L2, TFDP1, MRE11A, CCND1 and E2F1, while mRNA levels remains constant. MCTS1 hyperactivates DNA damage signaling pathway; increased gamma-irradiation-induced phosphorylation of histone H2AX, and induces damage foci formation. MCTS1 increases the overall number of chromosomal abnormalities such as larger chromosomes formation and multiples chromosomal fusions when over-expressed in gamma-irradiated cells. MCTS1 may play a role in promoting lymphoid tumor development: lymphoid cell lines over-expressing MCTS1 exhibit increased growth rates and display increased protection against apoptosis. MCTS1 may contribute to the pathogenesis and progression of breast cancer via promotion of angiogenesis through the decline of inhibitory THBS1/thrombospondin-1, and inhibition of apoptosis. MCTS1 is involved in the process of proteasome degradation to down-regulate Tumor suppressor p53/TP53 in breast cancer cell; MCTS1 positively regulates phosphorylation of MAPK1 and MAPK3.

**Synonyms:**

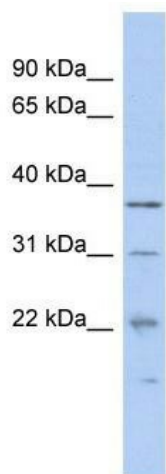
MCT-1; MCT1

**Note:**

Immunogen Sequence Homology: Dog: 100%; Pig: 100%; Human: 100%; Bovine: 100%; Guinea pig: 100%; Rat: 93%; Mouse: 93%; Rabbit: 93%; Zebrafish: 86%

**Protein Families:**

Druggable Genome

**Product images:**

WB Suggested Anti-MCTS1 Antibody Titration:  
0.2-1 ug/ml; ELISA Titer: 1: 312500; Positive  
Control: COLO205 cell lysate MCTS1 is supported  
by BioGPS gene expression data to be expressed  
in COLO205