

Datasheet for ABIN5711965

**MCTS1 Protein (AA 1-181, full length) (His-SUMO Tag)**[Go to Product page](#)**1** Image

## Overview

Quantity:	100 µg
Target:	MCTS1
Protein Characteristics:	full length, AA 1-181
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Purification tag / Conjugate:	This MCTS1 protein is labelled with His-SUMO Tag.
Application:	SDS-PAGE (SDS)

## Product Details

Sequence:	MFKKFDEKEN VSNCIQLKTS VIKGIKNQLI EQFPGIEPWL NQIMPKKDPV KIVRCHEHIE ILTVNGELLF FRQREGPFYP TLRLHKKYPF ILPHQQVDKG AIKFVLSGAN IMCPGLTSPG AKLYPAAVDT IVAIMAEGKQ HALCVGVMKM SAEDIEKVNK GIGIENIHYL NDGLWHMKT Y K
Purification:	SDS-PAGE
Purity:	> 90 %

## Target Details

Target:	MCTS1
Alternative Name:	MCTS1 ( <a href="#">MCTS1 Products</a> )
Background:	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.

## Target Details

When constitutively expressed, increases CDK4 and CDK6 kinases activity and CCND1/cyclin D1 protein level, as well as G1 cyclin/CDK complex formation. Involved in translation initiation, promotes recruitment of aminoacylated initiator tRNA to P site of 40S ribosomes. Can promote release of deacylated tRNA and mRNA from recycled 40S subunits following ABCE1-mediated dissociation of post-termination ribosomal complexes into subunits. Plays a role as translation enhancer, recruits the density-regulated protein/DENR and binds to the cap complex of the 5'-terminus of mRNAs, subsequently altering the mRNA translation profile, up-regulates protein levels of BCL2L2, TFDP1, MRE11A, CCND1 and E2F1, while mRNA levels remains constant. Hyperactivates DNA damage signaling pathway, increased gamma-irradiation-induced phosphorylation of histone H2AX, and induces damage foci formation. Increases the overall number of chromosomal abnormalities such as larger chromosomes formation and multiples chromosomal fusions when overexpressed in gamma-irradiated cells. May play a role in promoting lymphoid tumor development: lymphoid cell lines overexpressing MCTS1 exhibit increased growth rates and display increased protection against apoptosis. 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. Involved in the process of proteasome degradation to down-regulate Tumor suppressor p53/TP53 in breast cancer cell, Positively regulates phosphorylation of MAPK1 and MAPK3. Involved in translation initiation, promotes aminoacylated initiator tRNA to P site of 40S ribosomes. Can promote release of deacylated tRNA and mRNA from recycled 40S subunits following ABCE1-mediated dissociation of post-termination ribosomal complexes into subunits

Molecular Weight:	36.54 kDa
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UniProt:	<a href="#">Q9ULC4</a>
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## Application Details

Application Notes:	Optimal working dilution should be determined by the investigator.
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Restrictions:	For Research Use only
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## Handling

Format:	Liquid
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Concentration:	0.1-2 mg/mL
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Buffer:	20 mM Tris-HCl based buffer, pH 8.0
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Storage:	-80 °C, 4 °C, -20 °C
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Handling

Storage Comment: Store at -20°C, for extended storage, conserve at -20°C or -80°C. Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.

Images



**SDS-PAGE**

**Image 1.**