

## Product datasheet for **RC402420**

### Tuberin (TSC2) (NM\_000548) Human Mutant ORF Clone

#### Product data:

Product Type:	Mutant ORF Clones
Product Name:	Tuberin (TSC2) (NM_000548) Human Mutant ORF Clone
Mutation Description:	Y1033X
Affected Codon#:	1033
Affected NT#:	3099
Nucleotide Mutation:	TSC2 Mutant (Y1033X), Myc-DDK-tagged ORF clone of Homo sapiens tuberous sclerosis 2 (TSC2), transcript variant 1 as transfection-ready DNA
Effect:	Tuberous sclerosis
Symbol:	Tuberin
Synonyms:	LAM; PPP1R160; TSC4
E. coli Selection:	Kanamycin (25 ug/mL)
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
Tag:	Myc-DDK
ACCN:	NM_000548
ORF Size:	3096 bp
Restriction Sites:	SgfI-XhoI
ORF Nucleotide Sequence:	>RC402420 representing NM_000548 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCCAAACCAACAAGCAAAGATTCAGGCTTGAAGGAGAAGTTTAAGATTCTGTTGGGACTGGGAACAC  
CGAGGCCAAATCCCAGGTCTGCAGAGGGTAAACAGACGGAGTTTATCATCACCGCGGAAATACTGAGAGA  
ACTGAGCATGGAATGTGGCCTCAACAATCGCATCCGGATGATAGGGCAGATTTGTGAAGTCGCAAAAACC  
AAGAAATTTGAAGAGCACGCAGTGAAGCACTCTGGAAGGCGGTGCGGGATCTGTTGCAGCCGGAGCGGC  
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GGTCTCAGAGCCCTCTCTTTAAGGTCAAGGATTACCCTTCCAACGAAGACCTTCACGAAAGGCTG  
GAGTTTTCAAGGCCCTCACAGACAATGGGAGACACATCACCTACTTGGAGGAAGAGCTGGCTGACTTTG



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TCCTGCAGTGGATGGATGTTGGCTTGTCTCGGAATTCCTTCTGGTGCTGGTGAACCTGGTCAAATTCAA  
 TAGCTGTTACCTCGACGAGTACATCGCAAGGATGGTTCAGATGATCTGTCTGCTGTGCGTCCGGACCGCG  
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 TCGCAGCTCTCCACATCCCGAGGATAAAGACCACCAGTCCGAAAGCTGGCCACCCAGTTGCTGGTGG  
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 AGTATGCCAGTGTGTTGCCATCTCCCTGCCGTACACCAACCCCTCCAAGTTTAAATCAGTACATCGTGTG  
 TCTGGCCATCAGCTCATAGCCATGTGGTTCATCAGGTGCCGCTGCCCTTCCGGAAGGATTTTGTCCCT  
 TTCATCTACTAAGGGCCTGCGGTCCAATGTCTTCTGCTTTTGTGATGACACCCCGAGAAGGACAGCTTCA  
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 AGTGTGCTGAACATGTGGTCCGAGCAGGATACAGACGTCCCTCACCAGTGCAGCTTGGGGTCTGCAG  
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 GGACATGATGGCTCGA

AGCGGACCGACGCGTACGCGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC  
 TGGATTACAAGGATGACGACGA TAAGTTTAA



<b>Components:</b>	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).
<b>RefSeq:</b>	<a href="#">NP_000539</a>
<b>RefSeq Size:</b>	3096 bp
<b>RefSeq ORF:</b>	5424 bp
<b>Locus ID:</b>	7249
<b>Cytogenetics:</b>	16p13.3
<b>Domains:</b>	Rap_GAP, Tuberin
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Insulin signaling pathway, mTOR signaling pathway, p53 signaling pathway
<b>MW:</b>	113.5 kDa
<b>Gene Summary:</b>	Mutations in this gene lead to tuberous sclerosis complex. Its gene product is believed to be a tumor suppressor and is able to stimulate specific GTPases. The protein associates with hamartin in a cytosolic complex, possibly acting as a chaperone for hamartin. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Jul 2008]