

Product datasheet for **RC402428**

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:	Q1089X
Affected Codon#:	1089
Affected NT#:	3265
Nucleotide Mutation:	TSC2 Mutant (Q1089X), Myc-DDK-tagged ORF clone of Homo sapiens tuberous sclerosis 2 (TSC2), transcript variant 1 as transfection-ready DNA
Effect:	Tuberous sclerosis
Symbol:	TSC2
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:	3264 bp
Restriction Sites:	SgfI-XhoI
ORF Nucleotide Sequence:	>RC402428 representing NM_000548 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCCAAACCAACAAGCAAAGATTCAGGCTTGAAGGAGAAGTTTAAGATTCTGTTGGGACTGGGAACAC
CGAGGCCAAATCCCAGGTCTGCAGAGGGTAAACAGACGGAGTTTATCATCACCGCGGAAATACTGAGAGA
ACTGAGCATGGAATGTGGCCTCAACAATCGCATCCGGATGATAGGGCAGATTTGTGAAGTCGAAAAACC
AAGAAATTTGAAGAGCACGCAGTGAAGCACTCTGGAAGGCGGTCGCGGATCTGTTGCAGCCGGAGCGGC
CGCTGGAGGCCCGCACGCGGTCTGGCTCTGCTGAAGCCATCGTGCAGGGGCAGGGCGAGCGTTTGGG
GGTCTCAGAGCCCTCTCTTTAAGGTCATCAAGGATTACCCTTCCAACGAAGACCTTCACGAAAGGCTG
GAGTTTTCAAGGCCCTCACAGACAATGGGAGACACATCACCTACTTGGAGGAAGAGCTGGCTGACTTTG



[View online »](#)

TCCTGCAGTGGATGGATGTTGGCTTGTCTCGGAATTCCTTCTGGTGCTGGTGAACCTGGTCAAATTCAA
TAGCTGTTACCTCGACGAGTACATCGCAAGGATGGTTCAGATGATCTGTCTGCTGTGCGTCCGGACCGCG
TCCTCTGTGGACATAGAGGTCTCCCTGCAGGTGCTGGACGCCGTGGTCTGCTACAACCTGCCTGCCGGCTG
AGAGCCTCCCGCTGTTTCATCGTTACCCTCTGTGCGACCATCAACGTCAAGGAGCTCTGCGAGCCTTGCTG
GAAGCTGATGCGGAACCTCCTTGGCACCCACCTGGGCCACAGCGCCATCTACAACATGTGCCACCTCATG
GAGGACAGACCTACATGGAGGACGCGCCCTGCTGAGAGGAGCCGTGTTTTTGTGGCAGCTGGCTCTCT
GGGAGGCCACCGGCTATTCTCTCAGGAACCTGCGGACATCTGTGTTGCCATATTTTACCAGGCCAT
GGCATGTCCGAACGAGGTGGTGTCTATGAGATCGTCCCTGTCCATCACCAGGCTCATCAAGAAGTATAGG
AAGGAGCTCCAGGTGGTGGCGTGGGACATTCTGCTGAACATCATCGAACGGCTCCTTTCAGCAGCTCCAGA
CCTTGGACAGCCCGGAGCTCAGGACCATCGTCCATGACCTGTTGACCACGGTGGAGGAGCTGTGTGACCA
GAACGAGTTCACGGGTCTCAGGAGAGATACTTGAACCTGGTGGAGAGATGTGCGGACCAGAGGCCTGAG
TCCTCCCTCTGAACCTGATCTCTATAGAGCGCAGTCCATCCACCCGGCCAAGGACGGCTGGATTGAGA
ACCTGCAGGCGCTGATGGAGAGATTCTCAGGAGCGAGTCCCGAGGCGCCGTGCGCATCAAGGTGCTGGA
CGTGTCTCCTTTGTGCTGCTCATCAACAGGCAGTTCTATGAGGAGGAGCTGATTAACCTAGTGGTTCATC
TCGAGCTCTCCACATCCCGAGGATAAAGACCACCAGTCCGAAAGCTGGCCACCCAGTTGCTGGTGG
ACCTGGCAGAGGGCTGCCACACACACCCTTCAACAGCCTGCTGGACATCATCGAGAAGGTGATGGCCCC
CTCCCTCTCCCCACCCCGGAGCTGGAAGAAAGGGATGTGGCCGCATACTCGGCCCTCCTTGGAGGATGTG
AAGACAGCCGTCTGGGGCTTCTGGTCACTTTCAGACCAAGCTGTACACCCTGCCTGCAAGCCACGCCA
CGCGTGTGATGAGATGCTGGTCCAGCCACATTCAGTCCACTACAAGCACAGCTACACCCTGCCAATCGC
GAGCAGCATCCGGCTGCAGGCCCTTGTACTTCTGTTGCTGCTGCGGGCCGACTCACTGCACCCGCTGGGC
CTGCCAACAAAGGATGGAGTCTGCGGTTCCAGCCCTACTGCGTCTGCGACTACATGGAGCCAGAGAGAG
GCTCTGAGAAGAAGACCAGCGGCCCTTCTCCTCCACAGGGCCTCCTGGCCCGCGCCTGCAGGCC
CGCCGTGCGGCTGGGGTCCGTGCCCTACTCCCTGCTCTCCGCGTCTGCTGCAGTGTGAAGCAGGAG
TCTGACTGGAAGGTGCTGAAGCTGGTTCGGGACAGGCTGCCTGAGTCCCTGCGCTATAAAGTGCTCATCT
TTACTTCCCCTTGCAGTGTGGACCAGCTGTGCTGCTCTGCTCCATGCTTTTTCAGGCCAAAGACACT
GGAGCGGCTCCGAGGCGCCCGAAGGCTTCTCCAGAAGTACTGACCTGGCCGTGGTTCAGTGTG
ACAGCATTAACTCTTACCATAACTACCTGGACAAAACCAAACAGCGGAGATGGTCTACTGCCTGGAGC
AGGGCCTCATCCACCGCTGTGCCAGCCAGTGCCTGCTGGCCTTGTCCATCTGCAGCGTGGAGATGCCTGA
CATCATCATCAAGGCGCTGCCTGTTCTGGTGGTGAAGCTCACGCACATCTCAGCCACAGCCAGCATGGCC
GTCCACTGCTGGAGTTCCTGTCCACTCTGGCCAGGCTGCCGCACCTCTACAGGAACTTTGCCCGGAGC
AGTATGCCAGTGTGTTGCCATCTCCCTGCCGTACACCAACCCCTCCAAGTTTAAATCAGTACATCGTGTG
TCTGGCCATCAGCTCATAGCCATGTGGTTCATCAGGTGCCGCTGCCCTTCCGGAAGGATTTTGTCCCT
TTCATCTACTAAGGGCCTGCGGTCCAATGTCTCTTGTCTTTTGTGATGACACCCCGAGAAGGACAGCTTCA
GGGCCCGGAGTACTAGTCTCAACGAGAGACCAAGAGTCTGAGGATAGCCAGACCCCCCAACAAGGCTT
GAATAACTCTCCACCCGTGAAAGAAATCAAGGAGAGCTCTGCAGCCGAGGCTTCCGGTGGCCGACGATC
AGTGTGCTGAACATGTGGTCCGACGAGGATACAGACGTCCTCACCAGTGCAGCTTGGGGTCTGCAG
ATGAGAACTCCGTGGCCAGGCTGACGATAGCCTGAAAAACCTCCACCTGGAGCTCACGGAAACCTGTCT
GGACATGATGGCTCGATACGTCTTCTCAACTTACGGCTGTCCGAAAGAGGTCTCCTGTGGGCGAGTTC
CTCCTAGCGGGTGGCAGGACAAAACCTGGCTGGTGGGAACAAGCTTGTCACTGTGACGACAAGCGTGG
GAACCGGACCCGGTCTTACTAGGCCCTGGACTCGGGGAGCTG

AGCGGACCGACGCTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
TGGATTACAAGGATGACGACGA TAAGGTTTAA

Components:	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).
RefSeq:	NP_000539
RefSeq Size:	3264 bp
RefSeq ORF:	5424 bp
Locus ID:	7249
Cytogenetics:	16p13.3
Domains:	Rap_GAP, Tuberin
Protein Families:	Druggable Genome
Protein Pathways:	Insulin signaling pathway, mTOR signaling pathway, p53 signaling pathway
MW:	119.7 kDa
Gene Summary:	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]