

## Product datasheet for **KN211461LP**

### Tuberin (TSC2) Human Gene Knockout Kit (CRISPR)

#### Product data:

Product Type:	Knockout Kits (CRISPR)
Format:	2 gRNA vectors, 1 Luciferase-Puro donor, 1 scramble control
Donor DNA:	Luciferase-Puro
Symbol:	Tuberin
Locus ID:	7249
Components:	<b>KN211461G1</b> , Tuberin gRNA vector 1 in pCas-Guide CRISPR vector (GE100002) <b>KN211461G2</b> , Tuberin gRNA vector 2 in pCas-Guide CRISPR vector (GE100002) <b>KN211461LPD</b> , donor DNA containing left and right homologous arms and Luciferase-Puro functional cassette.

Homologous arm and Luciferase-Puro sequences:

pUC vector backbone in gray; Left arm sequence in blue; Luciferase-Puro in green;

Right arm in violet

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ACGGGGCAGC GGCCTAGAGA GCGGGACCCC GCAGTGTCCG GGTCCCGGGC CCTCACCCGC GCCCACTGCA
ACCCGACTCC GGAGCTCCGA GCATCCCTTA GTTTAAAGTC ATGGCGGGTG CGAACGGGTC TCTGCTGCAG
GCGGCTCCGT GACAGCTCCT GCTTACATG GGTAGAGGAG AGACGGCAAA CGTCGGGGCT CCCAGGACTT
CGCGGCGGCA GTCCTAACCC GTGCACTGAG TCGGGCGGGG CGGGCGGCAG CGTCTGAGTA GAGAGCTCTC
TAGACCAGGC CTGGTGTCTC CCGGGCTTTC CTAGGTGCCT GTTTGCGAGC TGGTCAGCTG GGCTGTAGTT
GAGTTCTCCC AGGGAGTGTG GGAGGAAAGG TTATGCCAC CAGAGACCCA GGGTCTGAC GGCTGGAGGT
CCGCAGTGGG GAAGGTGGGC AGAGGTGTTG CTCAGATGTC CCCATTCTG TTTCTGTTGC ACAGAGGGGT
TTTCTGGTGC GTCCTGGTCC ACCTGCAGAG GGTAAACAGA CGGAGTTTAT CATCACCCGC GAAATACTGA
GAGTGAGTGA GCTACCTGTG TCTTTGCTAG GCTAGAGGGA AATGCAGAGA AGGCTGGGTT TGGTCTTGCA
CCAGGTTCTG TGGGAGACGG GTTGCTGGCA ACTGTCTACA CAGGAATGCT GTCTCCAGTA CTTGGAGGCC
GACATGTCTT TCCTCAGGAG ACTTCGAAAG TCAGGATCTT GGTGACCTGG TTCAGGCACA CTTGAGTTAC
TATTGAGATG TTGATGAAAG AAAGCCCATC TTATAGATGA GGCCTGAGTA TCATCATCTT CACAGGTAAG
GATATGTCCA GGTGTTACAT GATAAGATGT GAGTTCCTGG GAGAAGTAGG TTCTTTATTT TATTTTTTTT
TTGAGACTGA GTCTTGCTCT GTTGCTAGG CTGGAGTGA GTGGACAAT CTCTGCTCGC TGCTACCTCT
GCCTCCAGT TTCAAGTGGT TCTCCTGCCT CAGCCTCTG AGTAGCTGGG ACTACAGACA CGTGCCACCA
CACCCATTTA ATTTTTGTAT TTTTAGTAGA GATGGAGTTT CACTATCTTG GCCAGGCTGG TCT

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**GE100003**, scramble sequence in pCas-Guide vector

#### Disclaimer:

These products are manufactured and supplied by OriGene under license from ERS. The kit is designed based on the best knowledge of CRISPR technology. The system has been functionally validated for knocking-in the cassette downstream the native promoter. The efficiency of the knock-out varies due to the nature of the biology and the complexity of the experimental process.



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**RefSeq:** [NM\\_000548](#), [NM\\_001077183](#), [NM\\_001114382](#), [NM\\_001318827](#), [NM\\_001318829](#),  
[NM\\_001318831](#), [NM\\_001318832](#), [NM\\_021055](#), [NM\\_021056](#), [NM\\_001363528](#), [NM\\_001370405](#),  
[NM\\_001370404](#)

**UniProt ID:** [P49815](#)

**Synonyms:** LAM; PPP1R160; TSC4

**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]

### Product images:

