

Product datasheet for **KN211461**

Tuberin (TSC2) Human Gene Knockout Kit (CRISPR)

Product data:

Product Type:	Knockout Kits (CRISPR)
Format:	2 gRNA vectors, 1 GFP-puro donor, 1 scramble control
Donor DNA:	GFP-puro
Symbol:	Tuberin
Locus ID:	7249
Components:	<p>KN211461G1, Tuberin gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GTTTAAGATTCTGTTGGGAC</p> <p>KN211461G2, Tuberin gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GAACACCGAGGCCAAATCCC</p> <p>KN211461D, donor DNA containing left and right homologous arms and GFP-puro functional cassette.</p>

Homologous arm and GFP-puro sequences:

pUC vector backbone in gray; **Left arm sequence in blue**; **GFP-puro in green**; **Right arm in violet**

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AGAAGTAAGT TGGCCGCAGT GTTATCACTC ATGGTTATGG CAGCACTGCA TAATTCTCTT ACTGTCATGC
CATCCGTAAG ATGCTTTTCT GTGACTGGTG AGTACTCAAC CAAGTCATTC TGAGAATAGT GTATGCCGGC
ACCGAGTTGC TCTTGCCCGG CGTCAATACG GGATAATACC GCGCCACATA GCAGAATTTT AAAAGTGCTC
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 GCTAGAGTAA GTAGTTCGCC AGTTAATAGT TTGCGCAACG TTGTTGCCAT TGCTACAGGC ATCGTGGTGT
 CACGCTCGTC GTTTGGTATG GCTTCATTCA GCTCCGGTTC CCAACGATC

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.

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]

