

Product datasheet for KN213332LP

Hamartin (TSC1) 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:	Hamartin
Locus ID:	7248
Components:	 KN213332G1, Hamartin gRNA vector 1 in pCas-Guide CRISPR vector (GE100002) KN213332G2, Hamartin gRNA vector 2 in pCas-Guide CRISPR vector (GE100002) KN213332LPD, donor DNA containing left and right homologous arms and Luciferase-Puro functional cassette. GE100003, scramble sequence in pCas-Guide vector
RefSeq:	<u>NM 000368, NM 001008567, NM 001162426, NM 001162427, N63914, NM 001362177</u>
UniProt ID:	<u>Q92574</u>
Synonyms:	LAM; TSC
Summary:	This gene is a tumor suppressor gene that encodes the growth inhibitory protein hamartin. The encoded protein interacts with and stabilizes the GTPase activating protein tuberin. This hamartin-tuberin complex negatively regulates mammalian target of rapamycin complex 1 (mTORC1) signalling which is a major regulator of anabolic cell growth. This protein also functions as a co-chaperone for Hsp90 that inhibits its ATPase activity. This protein functions as a facilitator of Hsp90-mediated folding of kinase and non-kinase clients, including Tsc2 and thereby preventing their ubiquitination and proteasomal degradation. Mutations in this gene have been associated with tuberous sclerosis. [provided by RefSeq, Apr 2018]



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Product images:



RFP, Luc, and mBFP will be under native gene promoter

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