

Product datasheet for KN317258RB

Tbc1d7 Mouse Gene Knockout Kit (CRISPR)

Product data:

Product Type: Knockout Kits (CRISPR)

Format: 2 gRNA vectors, 1 RFP-BSD donor, 1 scramble control

Donor DNA: Symbol: Tbc1d7 67046 Locus ID:

KN317258G1, Tbc1d7 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002) Components:

KN317258G2, Tbc1d7 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002)

KN317258RBD, donor DNA containing left and right homologous arms and RFP-BSD

functional cassette.

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.

NM 001252639, NM 001252640, NM 025935 RefSeq:

UniProt ID: Q9D0K0

Synonyms: 2610009C09Rik

Summary: Component of the TSC-TBC complex, that contains TBC1D7 in addition to the TSC1-TSC2

> complex and consists of the functional complex possessing GTPase-activating protein (GAP) activity toward RHEB in response to alterations in specific cellular growth conditions. The small GTPase RHEB is a direct activator of the protein kinase activity of mTORC1 and the TSC-TBC complex acts as a negative regulator of mTORC1 signaling cascade by acting as a GAP for RHEB. Participates in the proper sensing of growth factors and glucose, but not amino acids, by mTORC1. It is unclear whether TBC1D7 acts as a GTPase-activating protein and additional

studies are required to answer this question.[UniProtKB/Swiss-Prot Function]



OriGene Technologies, Inc. 9620 Medical Center Drive, Ste 200

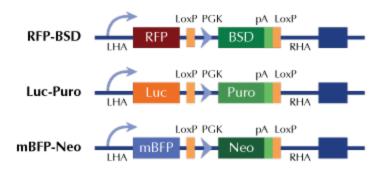
CN: techsupport@origene.cn

Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com



Product images:

Donor Vector Edited Chromosome



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