

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:	RFP-BSD
Symbol:	Tbc1d7
Locus ID:	67046
Components:	KN317258G1 , Tbc1d7 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002) 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.

RefSeq: [NM_001252639](#), [NM_001252640](#), [NM_025935](#)

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]



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Product images:

