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Product datasheet for KN209837

RHOB 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: RHOB

Locus ID: 388

Components: **KN209837G1**, RHOB gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: CAGTAAGGACGAGTTCCCCG
KN209837G2, RHOB gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GTGGTGGGCGACGGCGCGTG
KN209837D, donor DNA containing left and right homologous arms and GFP-puro functional cassette.
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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GGGGATCATG TAACTCGCCT T

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.

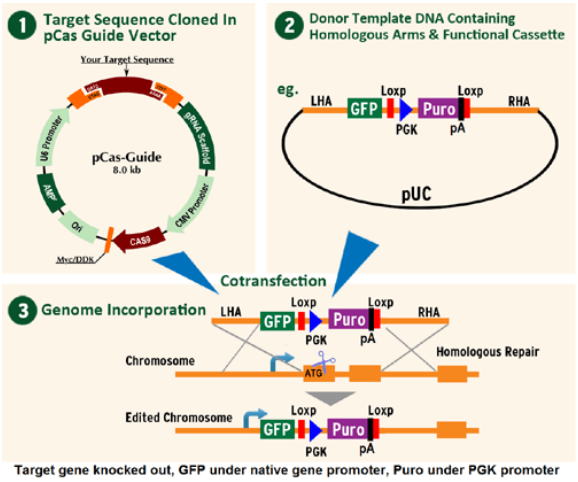
RefSeq: NM_004040

UniProt ID: P62745

Synonyms: ARH6; ARHB; MST081; MSTP081; RHOH6

Summary: Mediates apoptosis in neoplastically transformed cells after DNA damage. Not essential for development but affects cell adhesion and growth factor signaling in transformed cells. Plays a negative role in tumorigenesis as deletion causes tumor formation. Involved in intracellular protein trafficking of a number of proteins. Targets PKN1 to endosomes and is involved in trafficking of the EGF receptor from late endosomes to lysosomes. Also required for stability and nuclear trafficking of AKT1/AKT which promotes endothelial cell survival during vascular development. Serves as a microtubule-dependent signal that is required for the myosin contractile ring formation during cell cycle cytokinesis. Required for genotoxic stress-induced cell death in breast cancer cells.[UniProtKB/Swiss-Prot Function]

Product images:



Target gene knocked out, GFP under native gene promoter, Puro under PGK promoter