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Product datasheet for KN208776

MID1 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: MID1

Locus ID: 4281

Components: **KN208776G1**, MID1 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GATGGACTCCACAGACTCGT
KN208776G2, MID1 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GTGTGATACTAGGATGCGGT
KN208776D, 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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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_000381, NM_001098624, NM_001193277, NM_001193278, NM_001193279, NM_001193280, NM_001193281, NM_033289, NM_033290, NM_033291, NM_001347733

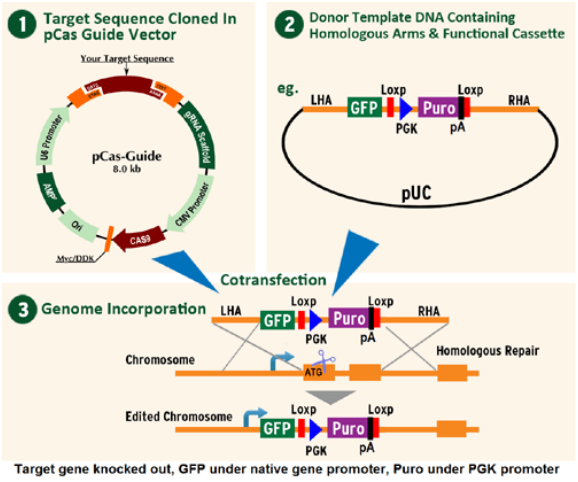
UniProt ID: O15344

Synonyms: BBBG1; FXY; GBBB1; MIDIN; OGS1; OS; OSX; RNF59; TRIM18; XPRF; ZNFXY

Summary:

The protein encoded by this gene is a member of the tripartite motif (TRIM) family, also known as the 'RING-B box-coiled coil' (RBCC) subgroup of RING finger proteins. The TRIM motif includes three zinc-binding domains, a RING, a B-box type 1 and a B-box type 2, and a coiled-coil region. This protein forms homodimers which associate with microtubules in the cytoplasm. The protein is likely involved in the formation of multiprotein structures acting as anchor points to microtubules. Mutations in this gene have been associated with the X-linked form of Opitz syndrome, which is characterized by midline abnormalities such as cleft lip, laryngeal cleft, heart defects, hypospadias, and agenesis of the corpus callosum. This gene was also the first example of a gene subject to X inactivation in human while escaping it in mouse. Alternative promoter use, alternative splicing and alternative polyadenylation result in multiple transcript variants that have different tissue specificities. [provided by RefSeq, Dec 2016]

Product images:



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