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Product datasheet for KN318498

Twist1 Mouse 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: Twist1

Locus ID: 22160

Components: **KN318498G1**, Twist1 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: TTGCTCAGGCTGTCGTCGGC
KN318498G2, Twist1 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: CTCGCCGGCTGCTGCCGGTC
KN318498D, 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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TACAGGCATC GTGGTGTCAC GCTCGTCGTT TGGTATGGCT TCATTCAGCT CCGGTTCCCA ACGATC

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.

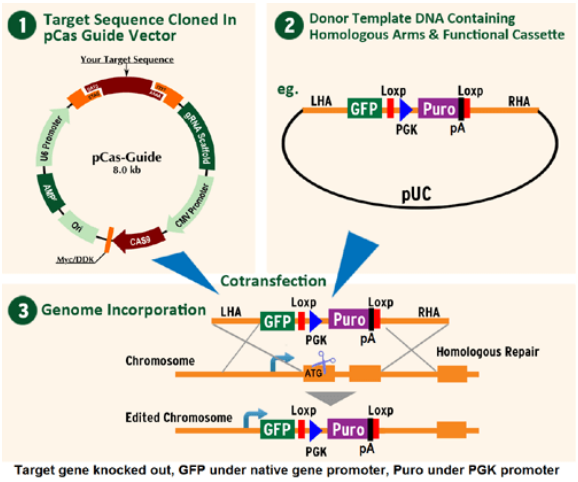
RefSeq: NM_011658

UniProt ID: P26687

Synonyms: bHLHa38; M-Twist; Pde; pdt; Ska10; Ska; Twist

Summary: Basic helix-loop-helix (bHLH) transcription factors have been implicated in cell lineage determination and differentiation. This gene encodes a bHLH transcription factor that is evolutionarily conserved from invertebrates to humans, and was originally identified in Drosophila as an essential gene involved in early mesoderm development and dorsal-ventral patterning in the embryo. This protein plays a role in cancer by regulating the epithelial-mesenchymal transition (EMT), a process that is critical for metastasis initiation, and promoting tumor progression. Mutations in the human gene are associated with Saethre-Chotzen syndrome (SCS). Mice with heterozygous mutations in this gene exhibit cranofacial and structural defects similar to those seen in human SCS patients. [provided by RefSeq, Sep 2015]

Product images:



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