

Product datasheet for KN222611BN

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TAP2 Human Gene Knockout Kit (CRISPR)

Product data:

Product Type: Knockout Kits (CRISPR)

Format: 2 gRNA vectors, 1 mBFP-Neo donor, 1 scramble control

Donor DNA: mBFP-Neo

Symbol: TAP2 Locus ID: 6891

Components: KN222611G1, TAP2 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence:

TGGTGGACGCGGCTTTACTG

KN222611G2, TAP2 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence:

TGGGGACTTTGCTTCCTCAA

KN222611BND, donor DNA containing left and right homologous arms and mBFP-Neo

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: <u>NM 000544, NM 001290043, NM 018833</u>

UniProt ID: Q03519

Synonyms: ABC18; ABCB3; APT2; D6S217E; PSF-2; PSF2; RING11



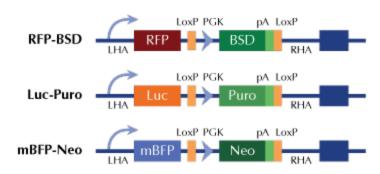


Summary:

The membrane-associated protein encoded by this gene is a member of the superfamily of ATP-binding cassette (ABC) transporters. ABC proteins transport various molecules across extra- and intra-cellular membranes. ABC genes are divided into seven distinct subfamilies (ABC1, MDR/TAP, MRP, ALD, OABP, GCN20, White). This protein is a member of the MDR/TAP subfamily. Members of the MDR/TAP subfamily are involved in multidrug resistance. This gene is located 7 kb telomeric to gene family member ABCB2. The protein encoded by this gene is involved in antigen presentation. This protein forms a heterodimer with ABCB2 in order to transport peptides from the cytoplasm to the endoplasmic reticulum. Mutations in this gene may be associated with ankylosing spondylitis, insulin-dependent diabetes mellitus, and celiac disease. Alternative splicing of this gene produces products which differ in peptide selectivity and level of restoration of surface expression of MHC class I molecules. [provided by RefSeq, Feb 2014]

Product images:

Donor Vector Edited Chromosome



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