

## Product datasheet for **KN222611**

### TAP2 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:** 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  
**KN222611D**, 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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 TGGGGGATCA TGTAACCTCGC CTT

**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\\_000544](#), [NM\\_001290043](#), [NM\\_018833](#)

**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:**
