

Product datasheet for KN305313BN

Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

OriGene Technologies, Inc. 9620 Medical Center Drive, Ste 200

Erap1 Mouse 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: Erap1 80898 Locus ID:

KN305313G1, Erap1 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002) Components:

KN305313G2, Erap1 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002)

KN305313BND, 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.

NM 030711 RefSeq: UniProt ID: Q9EQH2

Synonyms: Arts1; ERAAP; PILSA; PILSAP

Summary: Aminopeptidase that plays a central role in peptide trimming, a step required for the

> generation of most HLA class I-binding peptides. Peptide trimming is essential to customize longer precursor peptides to fit them to the correct length required for presentation on MHC class I molecules. Strongly prefers substrates 9-16 residues long, Rapidly degrades 13-mer to a 9-mer and then stops. Preferentially hydrolyzes the residue Leu and peptides with a

> hydrophobic C-terminus, while it has weak activity toward peptides with charged C-terminus. May play a role in the inactivation of peptide hormones. May be involved in the regulation of blood pressure through the inactivation of angiotensin II and/or the generation of bradykinin

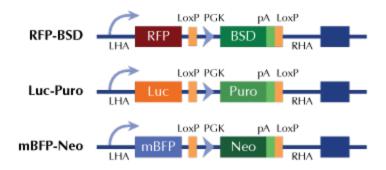
in the kidney (By similarity).[UniProtKB/Swiss-Prot Function]





Product images:

Donor Vector Edited Chromosome



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