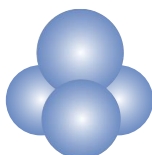


Product Specification Sheet

Product Name	pLV-EF1-dCas9-KRAB-PURO Lentiviral Vector
Description	<p>CRISPR (clustered regularly interspaced short palindromic repeats) interference (CRISPRi) is a widely used genetic technique that allows targeted silencing of transcription in bacteria and mammalian cells. The CRISPRi system is comprised of a catalytically inactive Cas9 (dCas9) protein fused with a transcriptional repressor such as the Krüppel-associated box (KRAB) repressor and a customizable single guide RNA (sgRNA). The Cas9-sgRNA complex binds to DNA elements complementary to the sgRNA and causes a steric block that halts transcript elongation by RNA polymerase, resulting in the repression of the target gene.</p> <p>pLV-EF1-dCas9-KRAB-PURO Lentiviral Vector expresses the dCas9-KRAB fusion with PURO and allows for PURO selection of transduced cells.</p>
Catalog Number	DK102
Size	10 µg at 0.5 µg/µL in TE
Shipping	Room temperature
Storage and Stability	Store at -20°C immediately upon receipt. This product is stable for 6 months when stored as directed.
Quality Control	This plasmid is sequence verified.
Safety Precaution	Remember that you will be working with samples containing infectious virus. Follow the recommended NIH guidelines for all materials containing BSL-2 organisms. The ALSTEM Lentiviral Expression System is designed to minimize the chance of generating replication-competent lentivirus, but precautions should still be taken to avoid direct contact with viral supernatants.
Restricted Use	For Research Use Only. Not for use in diagnostic or therapeutic procedures.



ALSTEM, INC

2600 Hilltop Drive, BLDG B, STE C328, Richmond, CA 94806

Tel: (510) 708-0096

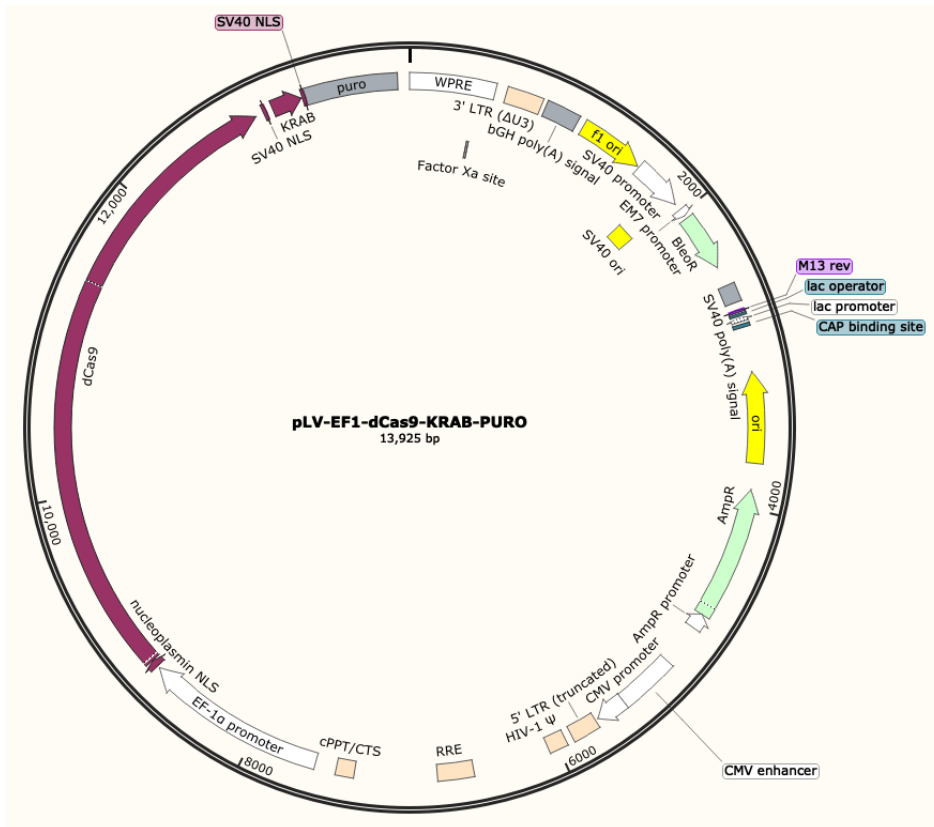
Fax: (866) 605-8766

www.alstembio.com

info@alstembio.com

Vector Information

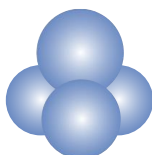
This is a lentiviral expression vector that contains all the elements necessary for efficient and high yield viral production. A ubiquitous EF1 promoter drives the expression of the dCas9-KRAB fusion protein and PURO to allow the selection of transduced cells. This vector can be used for stable cell line generation or in combination with a gene specific sgRNA to repress the target gene expression.



*Note: Bacterial culture of pLenti vectors should be done in medium containing **10 µg/mL** Ampicillin. For maximal plasmid yield and quality, we recommend *Stbl3* competent cells (Invitrogen).*

IMPORTANT NOTICE

Store the vial at -20°C immediately upon receipt.



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