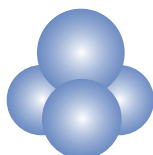


# Product Specification Sheet

<b>Product Name</b>	<b>pLV-EF1-dCas9-KRAB-T2A-BSD Lentiviral Vector</b>
<b>Description</b>	<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-T2A-BSD Lentiviral Vector expresses the dCas9-KRAB fusion with EF1 promoter and allows for BSD selection of transduced cells.</p>
<b>Catalog Number</b>	DK111
<b>Size</b>	10 µg at 0.5 µg/µL in TE
<b>Shipping</b>	Room temperature
<b>Storage and Stability</b>	Store at -20°C immediately upon receipt. This product is stable for 6 months when stored as directed.
<b>Quality Control</b>	This plasmid is sequence verified.
<b>Safety Precaution</b>	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.
<b>Restricted Use</b>	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

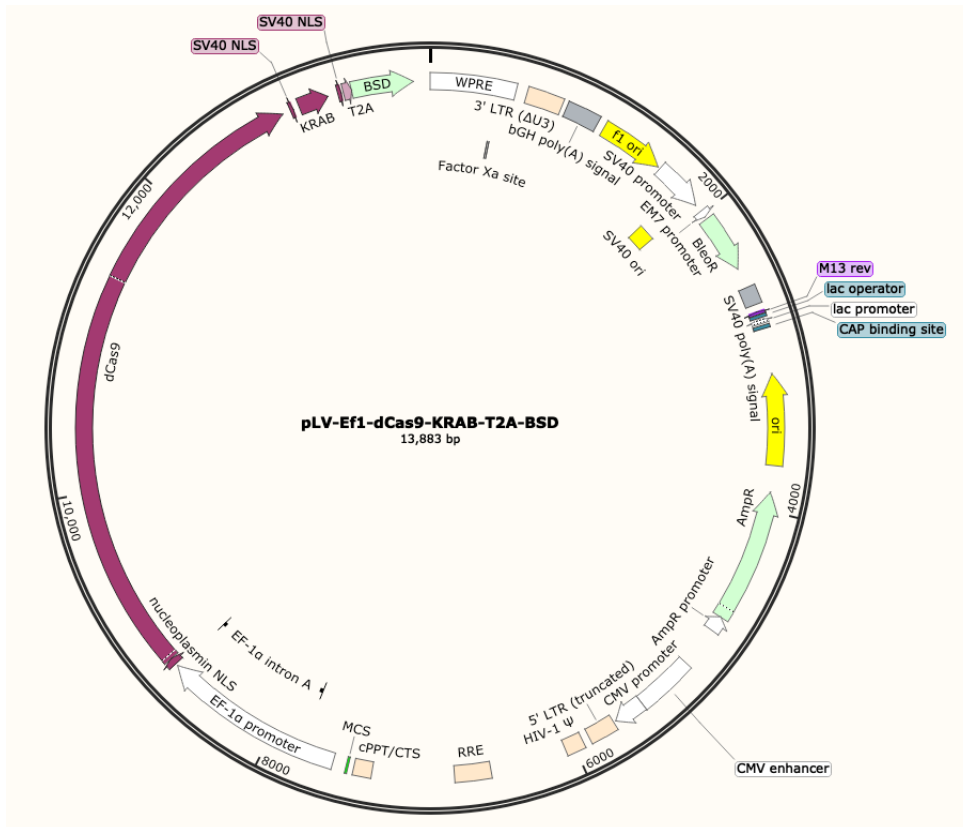
[www.alstembio.com](http://www.alstembio.com)

Fax: (866) 605-8766

[info@alstembio.com](mailto:info@alstembio.com)

## Vector Information

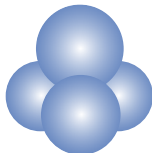
This is a lentiviral expression vector that contains all the elements necessary for efficient and high yield viral production. A ubiquitous EF1 promoter drives the expression of the dCas9-KRAB fusion protein and BSD to allow for selection of transduced cells. This vector can be used for stable cell line 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 **50 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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