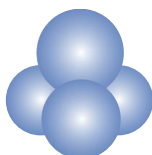


Product Specification Sheet

| | |
|------------------------------|---|
| Product Name | pLV-EF1-dCas9-KRAB-T2A-BSD 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-T2A-BSD Lentiviral Vector expresses the dCas9-KRAB fusion with EF1 promoter and allows for BSD selection of transduced cells.</p> |
| Catalog Number | DK111 |
| 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

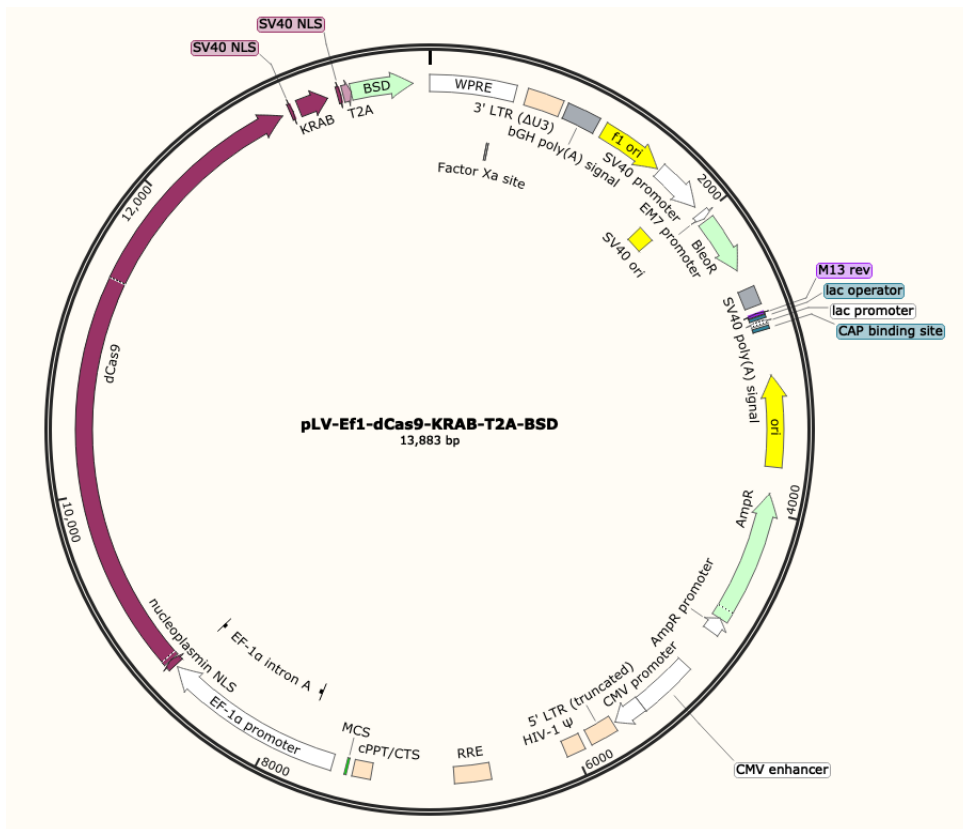
Fax: (866) 605-8766

www.alstembio.com

info@alstembio.com

Vector Information

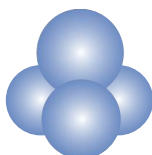
This is a lentiviral expression vector that contains all the elements necessary for efficient and high yield viral production. A ubiquitous EF1 promoter drives the expression of the dCas9-KRAB fusion protein and BSD to allow for selection of transduced cells. This vector can be used for stable cell line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