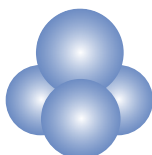


# Product Specification Sheet

<b>Product Name</b>	<b>pLenti-EF1-Cre-GFP-PGK-PURO</b>
<b>Description</b>	<p>The Cre/LoxP recombination system is a versatile and powerful tool for DNA manipulations such as deletions, insertions, translocations, and inversions at specific sites in the DNA of cells. The system uses Cre recombinase to recombine a pair of Lox sites. Depending on the direction and distance of the LoxP sites, DNA flanked by the LoxP sites can be deleted, inverted, or translocated.</p> <p>The Cre-GFP Lentivirus Vector (pLenti-EF1-Cre-GFP-PGK-PURO) expresses the Cre-GFP fusion protein in the nucleus and provides puromycin resistance to the cell receiving it. This lentivirus vector can be used for transient Cre expression and for stable cell line development. Robust Cre recombinase activity has been detected in stable transgenic cell lines that carry two loxP sites in the same direction in their transgenes. DNA deletion events were detected by PCR and validated by DNA sequencing.</p>
<b>Catalog Number</b>	CRE02
<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

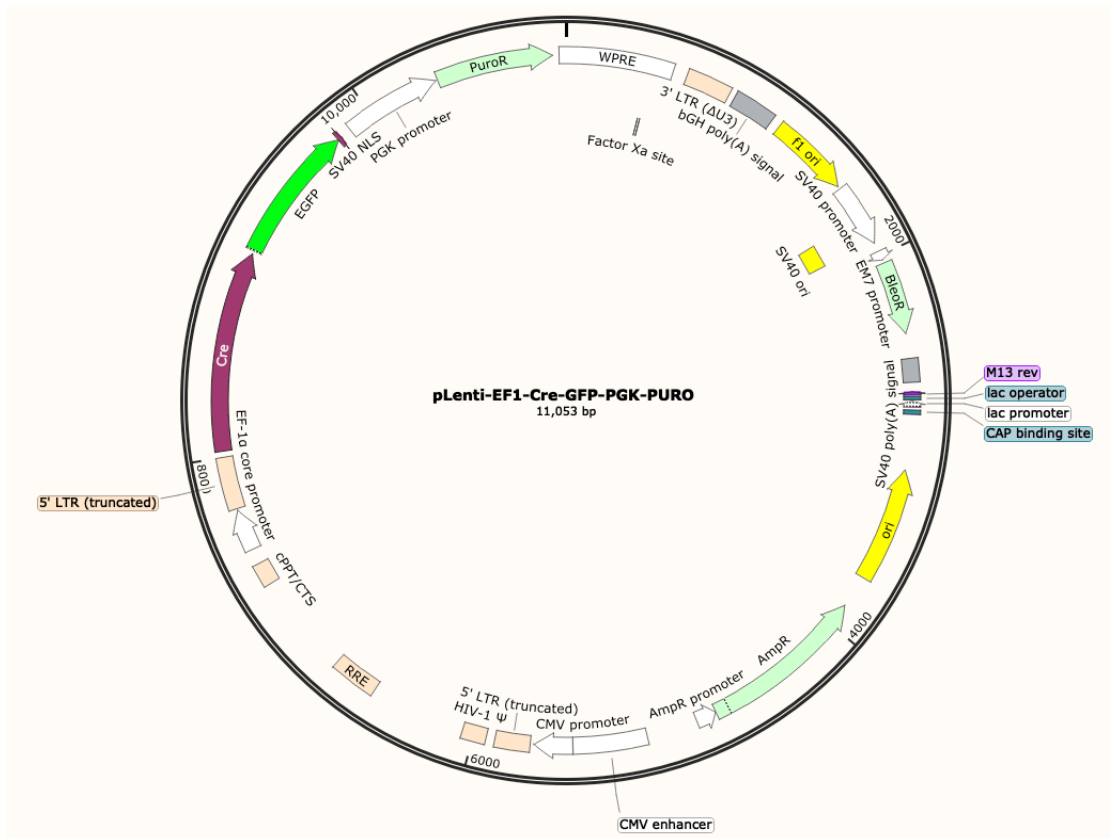
Fax: (866) 605-8766

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

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

## Vector Information

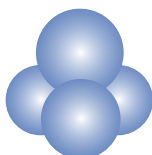
This is a lentiviral expression vector containing all elements for efficient and high yield viral production. A ubiquitous EF1 drives the expression of the Cre-GFP fusion protein in the nucleus and PURO to allow for selection of transduced cells. This vector can be used for transient Cre expression and stable cell line generation.



*Note: Bacterial culture of pLenti vectors should be done in medium containing 50  $\mu$ g/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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