## **Product Specification Sheet**

Product Name pLenti-EF1-mCherry-T2A-Cre-PGK-PURO

**Description** 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, inversed, or translocated.

The mCherry-Cre Lentivirus Vector (pLenti-EF1-mCherry-T2A-Cre-PGK-PURO) expresses the mCherry and Cre 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 event was detected by PCR and validated by DNA

sequencing.

Catalog Number CRE03

Size 10  $\mu$ g at 0.5  $\mu$ g/ $\mu$ L 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.



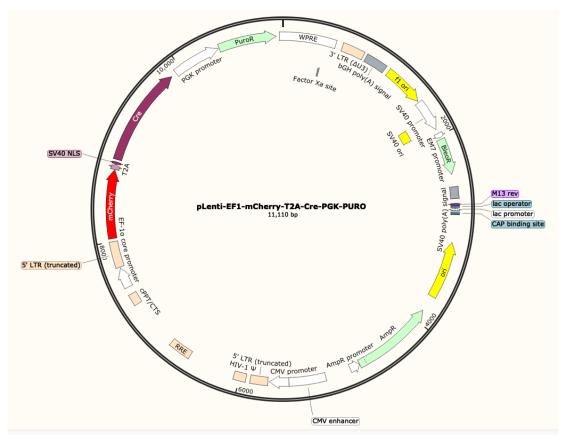
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## **Vector Information**

This is a lentiviral expression vector containing all elements for efficient and high yield viral production. A ubiquitous EF1 drives the expression of mCherry and Cre while PGK drives 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  $10 \,\mu\text{g/mL}$  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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