## **Product Specification Sheet**

Product Name pLenti-EF1-Luciferase-PGK-GFP-T2A-PURO Lentiviral Reporter Plasmid

**Description** Lentivirus vector based on the human immunodeficiency virus-1 (HIV-1) has

become a promising vector for gene transfer studies. Lentiviral vectors packaged as lentiviral particles is one of the most efficient tools to deliver exogenous genes into virtually any types of mammalian cells both in vitro and in vivo. The advantageous feature of lentivirus vector is the ability of gene transfer and integration into dividing and non-dividing cells, with low immune response and toxicity in vivo. These viruses also integrate stably into the host genome, enabling long-term

transgene expression. Our 3rd generation lentiviral systems have been designed for

increased researcher safety.

pLenti-EF1-Luciferase-PGK-GFP-T2A-Puro Lentiviral Reporter Plasmid contains Luciferase reporter driven by EF1 $\alpha$  promoter, GFP and Puromycin resistance gene are driven by PGK promoter respectively. This dual reporter vector serves a positive control. The cells transduced by this vector should display green fluorescence and

luciferase.

Catalog Number LR253

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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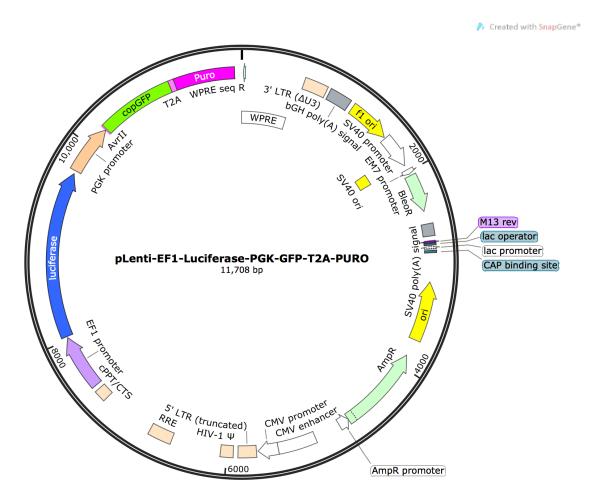
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## **Vector Information**

This is a control lentiviral reporter vector that contains all elements for efficient and high yield viral production. Luciferase and GFP fluorescent reporters are driven by promoters  $EF1\alpha$  and PGK, respectively. PGK promoter drives selection marker Puromycin. The cells transduced by this vector should display green fluorescence and luciferase.



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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