Product Specification Sheet

Product Name	**pLenti-CMV-MCS-LgBiT-EF1-PURO Lentiviral Vector**
Description	Large BiT (LgBiT; 17.6kDa) and Small BiT (SmBiT; 11 amino acids) subunits are fused to proteins of interest, and when expressed, the PPI brings the subunits into close proximity to form a functional enzyme that generates a bright, luminescent signal. Lentivirus vector based on the human immunodeficiency virus-1 (HIV-1) has become a promising vector for gene transfer studies. The advantageous feature of lentivirus vector is the ability of gene transfer and integration into dividing and nondividing cells. The pseudotyped envelope with vesicular stomatitis virus envelope G (VSV-G) protein broadens the target cell range. Lentiviral vectors have been shown to deliver genes to neurons, lymphocytes and macrophages, cell types that previous retrovirus vectors could not be used. Lentiviral vectors have also proven to be effective in transducing brain, liver, muscle, and retina in vivo without toxicity or immune responses. Recently, the lentivirus system is widely used to integrate siRNA efficiently in a wide variety of cell lines and primary cells both in vitro and in vivo. Lentivirus particles are produced from 293T cells through transient transfection of plasmids that encode for the components of the virion. Our third generation lentiviral systems have been designed for increased researcher safety. pLenti-CMV-LgBiT-MCS-EF1-PURO Lentiviral Reporter Vector contains the MCS-LgBiT for cloning of GOI (gene of interest) in frame with and at N-terminal of LgBiT driven by CMV promoter and PURO driven by EF1α promoter. The EF1-PURO cassette permits puromycin selection.
Catalog Number	LV1019
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

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

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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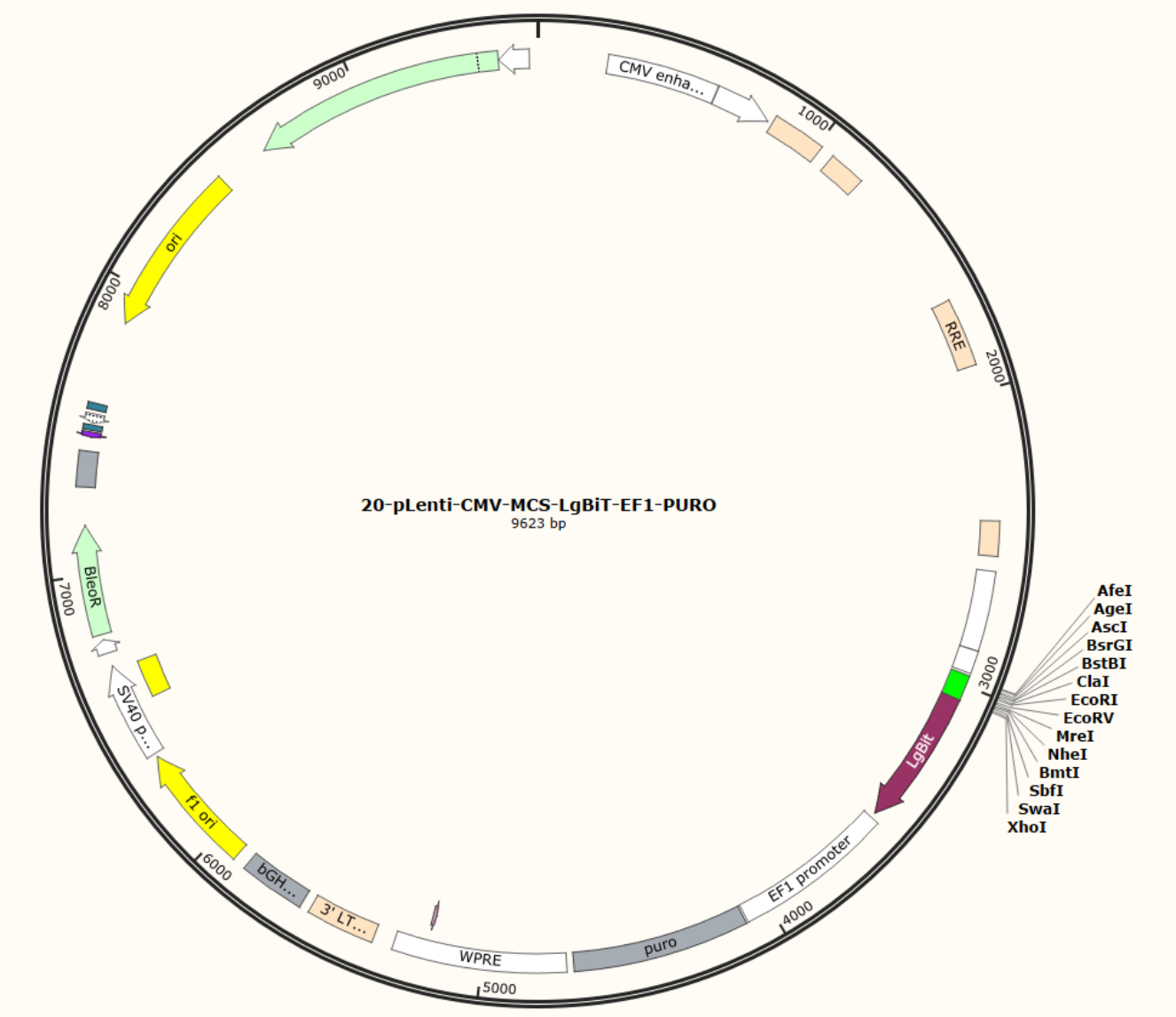
Vector Information

This is a lentiviral reporter vector that contains all the elements necessary for efficient and high yield viral production. A ubiquitous CMV promoter drives the expression of the GOI-LgBiT fusion protein and EF1-PURO cassette allows for selection of transduced cells. This vector can be used for stable cell line generation.



*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

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