



## Certificate Of Analysis for LITE Switch Inducible Expression System

Cat No. A001

Lot No. H160

### Product Information

The LITE Switch Plasmid Kit enables users to regulate gene expression using blue light in eukaryotic cells. The system uses an engineered version of EL222, a bacterial photosensor protein that binds to a specific DNA sequence when illuminated with blue light, but its activity is inhibited in the dark.

### Package Contents

- 20  $\mu$ l pVEL Plasmid (500 ng/  $\mu$ l)
- 20  $\mu$ l pC120 Plasmid (500 ng/  $\mu$ l)

### Storage Conditions

- Store all components at  $-20^{\circ}\text{C}$
- Spin briefly to recover contents
- Avoid repeated freeze/thaw cycles

### Shelf Life

1 year from date of receipt under proper storage conditions.

### Plasmid Storage Buffer

10 mM Tris-HCl (pH 8.0), 1 mM EDTA (pH 8.0)

### Shipping Conditions

Room temperature.

### User Manual and Plasmid Information

Contact us for product user manual and plasmid information at [support@optologixllc.com](mailto:support@optologixllc.com)

### Propagation in *E. coli*

- Selectable marker: plasmid confers resistance to ampicillin (100  $\mu\text{g/ml}$ ) in *E. coli* hosts.
- *E. coli* replication origin: pUC

### Reference

Motta-Mena LB, Reade A, Mallory MJ, Glantz S, Weiner OD, Lynch KW, & Gardner KH. (2014) *Nat Chem Biol* 10(3):196-202.

## Quality Control Data

### Plasmid Identity and Purity

Digestion with the indicated restriction enzymes produced fragments of the indicated sizes on a 1% agarose/EtBr gel:

Vector	Enzyme	Fragments
pVEL	NheI	3 kb and 0.9 kb
pC120	XhoI	2.5 kb and 0.25 kb
pVEL	A260/A280: 1.85	
pC120	A260/A280: 1.81	

Identity of each plasmid was also confirmed by sequencing.

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