

## LV-EF1A-OCT3/4 for both in vitro and in vivo

SKU: PLV-10012

### General Information

OCT3/4 (POU5F1) is a transcription factor that is expressed in stem cells and germ cells. Its expression is required to sustain cell self-renewal of undifferentiated stem cells. Oct-3/4 is the most recognized marker for totipotent ES cells. Ectopic expression of OCT3/4 has been used to produce iPS cells in culture.

Human elongation factor-1 alpha (EF-1 alpha) is a constitutive promoter of human origin that can be used to drive ectopic gene expression in various in vitro and in vivo contexts.

EF-1 alpha (or EF1a) is often useful in conditions where other promoters (such as CMV) have diminished activity or have been silenced (as in embryonic stem cells).

### Quick Facts:

<b>Virus:</b>	LV-EF1A-OCT3/4
<b>Titer (approx):</b>	1 x 10 <sup>8</sup> CFU/mL
<b>Vector Information:</b>	Vector includes both 5' and 3' lentiviral LTR and all necessary elements for effective transduction; woodchuck hepatitis virus posttranscriptional regulatory element (WPRE)
<b>Promoter for Target Gene:</b>	EF1A
<b>Target Gene / Reporter(s):</b>	OCT3/4
<b>Selection Gene:</b>	Puromycin
<b>Biosafety Level:</b>	BSL-2
<b>Shipped:</b>	Dry ice
<b>Storage:</b>	Store at -80C

**Comments:** N/A

**References:** N/A