

LV-CMV-RFP for both in vitro and in vivo

SKU: PLV-10035

General Information

TurboRFP is a red (orange) fluorescent protein (ex. 553 and em. 574 nm) derived from sea anemone *Entacmaea quadricolor* (Merzlyak et al., 2007). Possessing high photostability and pH stability, TurboRFP is more than twice brighter than DsRed2. Fast TurboRFP maturation makes it clearly detectable in mammalian cells as early as within 8-10 hrs after transfection.

This premade lentivirus includes both 5' and 3' lentiviral LTR and all necessary elements for effective transduction and expression of the target genes as well as antibiotics resistant genes or reporters. A woodchuck hepatitis virus posttranscriptional regulatory element (WPRE) is believed to promote RNA processing events and nuclear export, boosting expression of your gene of interest in target cells by facilitating the production of mature mRNA from transcripts initiated by the virus's internal promoter (e.g. pCMV).

This lentivirus expresses TurboRFP under the control of the CMV promoter.

Quick Facts:

Virus:	LV-CMV-RFP
Titer (approx):	1 x 10 ⁸ TU/mL
Vector Information:	Vector includes both 5' and 3' lentiviral LTR and all necessary elements for effective transduction; woodchuck hepatitis virus posttranscriptional regulatory element (WPRE)
Promoter for Target Gene:	CMV
Target Gene / Reporter(s):	turbo-RFP (ex. 553 and em. 574 nm)
Selection Gene:	Puromycin
Shipped:	Dry ice
Storage:	Store at -80C

Comments: N/A

References: Merzlyak EM, Goedhart J, Shcherbo D, Bulina ME, Shcheglov AS, Fradkov AF, Gaintzeva A, Lukyanov KA, Lukyanov S, Gadella TWJ, et al. (2007) Bright monomeric red fluorescent protein with an extended fluorescent lifetime. *Nat Methods* 4:555–557.