



## Description:

Lentiviruses such as the human immunodeficiency virus type 1 (HIV-1) can infect both dividing cells and non-proliferating cells. pCMVΔR8.91 was derived from pCMVΔR8.9 by further deletion of nef gene resulting in 4 accessory proteins of HIV-1 been deleted on this plasmid, i.e. Vif, Vpr, Vpu, and Nef. Multiply attenuated lentiviral vector keeps the ability to transduce growth-arrested cells and monocyte-derived macrophages in culture, and could also deliver genes into adult neurons in vivo efficiently. In short, pCMVΔR8.91 is a HIV-1 Gag and Polymerase (RT) expression plasmid. In addition, two of HIV-1 accessory proteins, Tat and Rev, can also be expressed on this plasmid. Importantly, no any ciselements for viral replication of HIBV-1 can be found on this plasmid.

## Location of features:

• CMV promoter:	27-614
• Gag:	888-2387
• Pol:	2184-5194
• Tat:	5288-5502,6378-6468
• Rev:	5427-5502,6378-6652
• Poly A:	6795-7157
• Bla promoter:	7985-8083
• Ampicillin resistance gene (AmpR) :	8083-8940
• pUC origin of replication (pUC ori):	9144-9684

## Reference:

1. Romain Zufferey, et al. Nature biotechnology (15) 871-874, 1997