Product Analysis Certificate

CRISPRa dCas9-VPH Expression Vector, pRDVCCB-CMV-dCas9-VPH-2A-Blast (Plasmid) Cat.# SVVPHC9B-PS



CRISPRa dCas9-VPH Expression Vector pRDVCCB-CMV-dCas9-VPH-2A-Blast (Plasmid)

Shipment Contents:	pRDVCCB-CMV-dCas9-VPH-2A-Blast Expression Vector (Plasmid)
	 Store at -20°C

Description:

Cellecta's two-vector lentiviral CRISPRa dCas9-VPH system can be used for transcription activation of any target gene *in vivo* or *in vitro* by using a combination of an sgRNA (single guide RNA) expression vector along with a dCas9-VPH fusion protein expression vector. The dCas9-VPH vector expresses "catalytic dead" Cas9 fused to the VP64, p65, and HSF1 transactivation domains. The dCas9-VPH vector also expresses the blasticidin resistance gene. Expression of dCas9-VPH is stable, and the system can be used in dividing or non-dividing cells or whole model organisms.

The plasmid CRISPRa dCas9-VPH vector can be packaged into VSV-G pseudotyped lentiviral particles using most commercially-available second or third-generation packaging mixes or Cellecta's second-generation psPAX2/pMD2.G packaging plasmid mix (Ready-to-use Packaging Plasmid Mix, Cat.# CPCP-K2A, 250 µg).

The titer of packaged virus can be functionally determined by transduction of target cells and either antibiotic selection assay or PCR titering of integrated lentiviral DNA.

Biosafety Level: BSL-2

Storage: -20°C

Shelf Life: 2 years from date of receipt

Shipping Conditions: Room Temperature, Blue Ice, or Dry Ice

Product Information (Cellecta Website):

User Manual: Please contact Cellecta at <u>tech@cellecta.com</u>. Vector Info: <u>https://www.cellecta.com/resources/vector-information/#CRISPRx</u>

Contents:

Catalog #	Description
SVVPHC9B-PS	CRISPRa dCas9-VPH Expression Vector pRDVCCB-CMV-dCas9-VPH-2A-Blast (Plasmid) <u>Plasmid, 25 μg:</u> 25 μg, 0.5 μg/μl (50 μl × 1 tube) Lot# 16110134; Store at -20°C

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CRISPRa dCas9-VPH Expression Vector, pRDVCCB-CMV-dCas9-VPH-2A-Blast (Plasmid) Cat.# SVVPHC9B-PS



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