dCas9-VP64

Catalog Number	LDG003POE
Package	20 μg / 100 μg / Customized package

For full product information, images and publications, please visit our website.

Specifications

Species of Origin

Streptococcus pyogenes

Expression system

Escherichia coli

Affinity Tag

His Tag (C-term)

Buffer

Lyophilized from a 0.2 μm filtered solution of PBS, pH 7.4.

Purity

>90% as determined by SDS-PAGE analysis.

Molecular weight

The protein has a calculated MW of 169.29 kDa. The protein migrates as 130-180 kDa under reducing condition (SDS-PAGE analysis).

Endotoxin level

<0.1 EU per 1 μg of the protein by the LAL method.

Form

Lyophilized

Background

Tainan Headquarter
+886-6-2536677
bd@leadgene.com.tw

Innovation & Research Center
+886-2-27065528

CLD Center
+886-6-2536677

Background

dCas9-VP64 refers to the dCas9 protein (#PDB: 5Y36_A) fused with the VP64 transcription activation domain, which is used in CRISPR-based gene activation. Comprising a deactivated Cas9 (dCas9) protein and VP64 transcriptional activator, it precisely targets gene promoters, enhancing gene expression without altering the DNA sequence. dCas9-VP64 offers a versatile tool for studying gene function, disease mechanisms, and potential therapeutic interventions.
dCas9 protein is an endonuclease-inactive version of Cas9 (CRISPR associated protein 9). dCas9 lacks endonuclease activity so that it binds but does not cleave cognate DNA, which can be used to localize transcriptional activators or repressors to specific DNA sequences in order to control transcription.

Synonyms

CRISPR-associated endonuclease Cas9/Csn1, SpCas9, SpyCas9

Sequence Note

Met1-Asp1368

Instruction

Reconstitution

It is recommended to reconstitute the lyophilized protein in sterile H_2O to a concentration not less than 200 µg/mL and incubate the stock solution for at least 20 min to ensure sufficient re-dissolved.

Shipping

The product is shipped with polar packs. Upon receipt, store it immediately at -20°C or lower for long term storage.

Tainan Headquarter
+886-6-2536677
bd@leadgene.com.tw

Innovation & Research Center
+886-2-27065528

CLD Center
+886-6-2536677

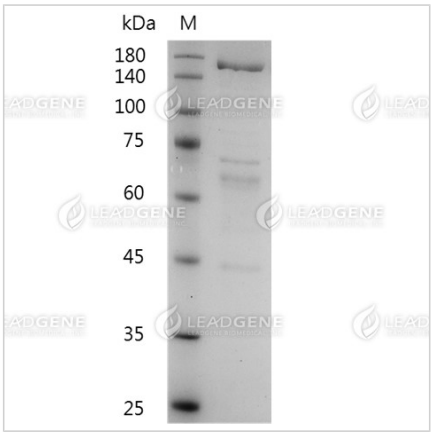
Stability & Storage

This product is stable after storage at:

- -20°C for 12 months in lyophilized state from date of receipt.
- -20°C or -80°C for 1 month under sterile conditions after reconstitution.

Avoid repeated freeze/thaw cycles.

Image



SDS-PAGE analysis of recombinant dCas9–VP64.

Disclaimer : For Research Use or Further Manufacturing Only.

Tainan Headquarter
+886-6-2536677
bd@leadgene.com.tw

Innovation & Research Center
+886-2-27065528

CLD Center
+886-6-2536677