

Produktinformation



Forschungsprodukte & Biochemikalien
Zellkultur & Verbrauchsmaterial
Diagnostik & molekulare Diagnostik
Laborgeräte & Service

Weitere Information auf den folgenden Seiten! See the following pages for more information!



Lieferung & Zahlungsart siehe unsere Liefer- und Versandbedingungen

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien T. +43(0)1 489 3961-0 F. +43(0)1 489 3961-7 <u>mail@szabo-scandic.com</u> www.szabo-scandic.com

Expression Negative Control Lentivirus (Inducible TET On™)

Description

Expression Negative Control Lentivirus (Inducible Tet On[™]) are replication incompetent, HIV-based, VSV-G pseudotyped lentiviral particles ready to transduce nearly all types of mammalian cells, including primary and non-dividing cells. These viral particles do not express any specific protein under a tight TRE tetracycline-inducible promoter but include a G418 selection marker (Figure 1).



Figure 1. Schematic of the lenti-vector used to generate the Expression Negative Control Lentivirus (Inducible TET On^{M}).

Background

The use of inducible expression systems is common in cell biology, as it allows for temporal control of gene expression, since expression can be reversibly turned on and off. In the case of the TET-On[™], a tetracycline-controlled transcriptional activation, treatment with tetracycline or a derivative can turn the system on. TRE (tetracycline response element) is usually upstream of a minimal promoter, which per se has very low expression, and shows very tightly regulated expression.

Application(s)

- Negative control in experiments involving lentiviral transduction of TET-On[™] expression vectors.
- Generate negative-control cell pools or stable cell lines following G418 selection, to validate the specificity of the effects observed by inducible expression of a protein of interest.

Formulation

The lentivirus particles were produced in HEK293T cells in medium containing 90% DMEM + 10% FBS. Virus particles can be packaged in custom formulations by special request, for an additional fee.

Size and Titer

Two vials (500 μ l x 2) of lentivirus at a titer $\geq 10^7$ TU/ml. The titer will vary with each lot; the exact value is provided with each shipment.

Storage

Lentiviruses are shipped with dry ice. For long-term storage, it is recommended to store the lentiviruses at -80°C. Avoid repeated freeze-thaw cycles. Titers can drop significantly with each freeze-thaw cycle.



Biosafety



The lentiviruses are produced with a SIN (self-inactivation) lentivector which ensures self-inactivation of the lentiviral construct after transduction and after integration into the genomic DNA of the target cells. None of the HIV genes (gag, pol, rev) will be expressed in the transduced cells, as they are expressed from packaging plasmids lacking the packing signal and are not present in the lentivirus particle. Although the pseudotyped lentiviruses are replication-incompetent, they require the use of a Biosafety Level 2 facility. BPS Bioscience recommends following all local federal, state, and institutional regulations and using all appropriate safety precautions.

Notes

To generate an Expression Negative Control stable cell line, remove the growth medium 48 hours after transduction and replace it with fresh growth medium containing the appropriate amount of G418 (as predetermined from a killing curve, https://bpsbioscience.com/kill-curve-protocol) for antibiotic selection of transduced cells, following by clonal selection.

Troubleshooting Guide

Visit bpsbioscience.com/lentivirus-faq for detailed troubleshooting instructions. For further questions, please email support@bpsbioscience.com.

Related Products

Products	Catalog #	Size
eGFP Lentivirus (Inducible TET On)	78629	500 µl x 2
Transduction Control (Tet-On) iPS Cell Pool	82289	

Version 081524



2