SZABO SCANDIC

Part of Europa Biosite

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

mail@szabo-scandic.com

www.szabo-scandic.com

linkedin.com/company/szaboscandic

Description

The Trop2 (Trophoblast cell-surface antigen 2) Lentiviruses 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 viruses transduce cells with *Macaca fascicularis* (also known as crab-eating macaque or cynomolgus monkey) Trop2 (XP_005543292.2) driven by an EF1A promoter. The lentiviruses also transduce a puromycin selection gene (Figure 1).

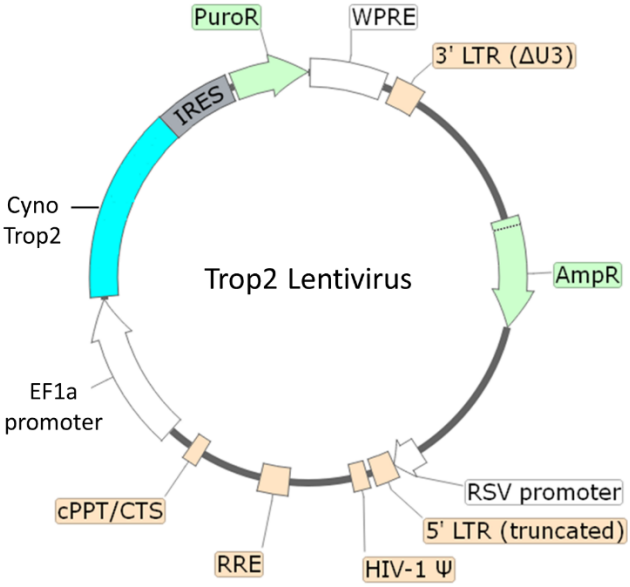

Figure 1: Schematic of the lenti-vector used to generate the cynomolgus Trop2 Lentivirus.

Background

Trophoblast cell-surface antigen 2 (Trop-2, also known as tumor-associated calcium signal transducer 2, TACSTD2, GA733-1 or M1S1), is a cell surface glycoprotein involved in stem-cell like functions. It is overexpressed in a variety of solid cancers compared to normal cells, and links with patient prognosis. Through a variety of signaling pathways, Trop-2 regulates cancer growth and metastasis. The use of antibodies, antibody-fusion proteins, small molecule inhibitors and other strategies directed at Trop-2 has resulted in promising results. Its use as biomarker and target in cancer therapy shows its importance in the field.

Application(s)

- Expression of Trop-2 in cells of interest.
- Generate stable cell lines expressing cynomolgus Trop2 (puromycin resistant).

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.

Titer

Two vials (500 µl x 2) of lentivirus at a titer ≥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 a Trop2 stable cell line, remove the growth medium 48 hours after transduction and replace it with fresh growth medium containing the appropriate amount of puromycin (as pre-determined from a killing curve), for antibiotic selection of transduced cells. Visit: https://bpsbioscience.com/cell-line-faq for guidelines on performing a kill curve.

Figures and Validation Data

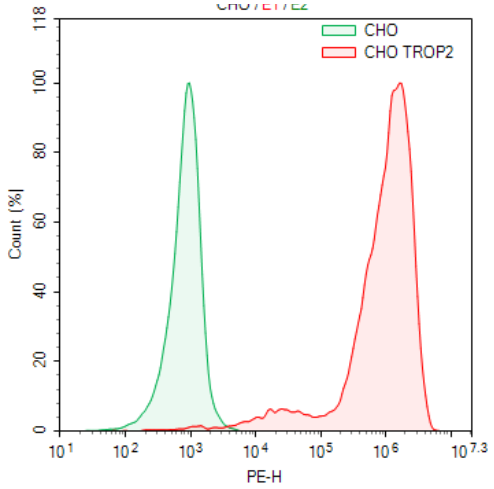

Figure 2. Expression of Trop2 in CHO-K1 cells using cynomolgus Trop2 lentivirus.
The cynomolgus Trop2 CHO cell pool was generated by transduction of CHO-K1 cells with Cynomolgus Trop2 lentivirus, followed by puromycin selection. The expression of cynomolgus Trop2 was analyzed by flow cytometry using PE anti-human TROP2 Antibody (Biolegend #363803 (red). Non-transduced CHO K1 cells were used as negative control (green).

Sequence

Cynomolgus TROP2 (Trophoblast cell-surface antigen 2) sequence (accession number XP_005543292.2)

MARGPGLAPPPLRLPLLLLLLAAVTGHTAAQDNCTCPTNKMTVCSPDGPGGRCQCRALGSGVAVDCSTLTSKCLLLKARMSAPK
NARTLVRPNEHALVDNDGLYDPDCDPEGRFKARQCNQTSVCWCVNSVGVRRTDKGDLSLRCDELVRTHHILIDLRHRPTASAFN
HSDLDAELRRLFRERYRLHPKFVAAVHYEQPTIQIELRQNTSQKAAGDVDIGDAAYYFERDVKGESLFQGRGGLDLRVRGEPLQV
ERTLIYYLDEIPPKFSMKRLTAGLIAVIVVVVVALVAGVAVLVISNRRKSGKYKKVEIKELGELRKEPSL

References

Shvartsur A. and Bonavida B., 2015, *Genes Cancer* 6 (304): 84-105.

Troubleshooting Guide

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

Related Products

Products	*Catalog #*	*Size*
TROP2-Cho-K1 Recombinant Cell Line	78099	2 vials
Trop2, Fc Fusion (IgG1), Avi-Tag Recombinant	101344	100 µg/1 mg
Trop2 Lentivirus	78710	500 µl x 2
FcRL5 Lentivirus	78715	500 µl x 2
BCMA Lentivirus	78714	500 µl x 2
PSMA Lentivirus	78726	500 µl x 2