

pTet-Off Advanced Vector

Catalog No.

631070

Amount

20 µg

Lot Number

Specified on product label.

Description

The pTet-Off Advanced Vector is used to create stable Tet-Off® Advanced cell lines as hosts for a Tet-inducible expression system. The Tet-Off Advanced protein is a modified Tet-responsive transactivator (tTA-Advanced) that binds tightly to tetracycline-responsive elements (TRE) and strongly activates transcription of a downstream gene in the absence of tetracycline (Tc) or doxycycline (Dox; a Tc derivative). As Tc or Dox is added to the culture medium, transcription from the TRE or TRE-Tight is turned off in a highly dose-dependent manner.

The Tet-Off Advanced gene is fully synthetic and has been optimized for expression and stability in mammalian cells by incorporating mammalian codon preferences and by removing cryptic splice sites from the mRNA. In addition, 3 minimal "F-type" HSV VP16 transcription activation domains provide maximal activation and reduced toxicity. The immediate early promoter of cytomegalovirus (*P_{CMV IE}*) produces strong constitutive expression of Tet-Off Advanced, which accumulates to high levels. Stable Tet-Off Advanced cell lines can be generated by transfecting the plasmid and selecting for G418-resistant clones.

Package Contents

- 20 µg pTet-Off Advanced Vector

Storage Conditions

- Store plasmids at –20°C.
- Spin briefly to recover contents.
- Avoid repeated freeze/thaw cycles.

Expiration Date

- Specified on product label.

Storage Buffer

- 10 mM Tris-HCl (pH 8.0), 1 mM EDTA (pH 8.0)

Concentration

- 500 ng/µl

Shipping Conditions

- Dry ice

Product Documents

Documents for our products are available for download at takarabio.com/manuals

The following documents apply to this product:

- pTet-Off Advanced Vector Information
- pTet-Off Advanced Vector Sequence in GenBank Format

Takara Bio USA, Inc.

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Certificate of Analysis

Cat. No. 631070

pTet-Off Advanced Vector

Propagation in *E. coli*

- Ampicillin (100 µg/ml for propagation in *E. coli* cells)

Quality Control Data

Plasmid Identity & Purity

- Digestion with the indicated restriction enzymes produced fragments of the indicated sizes on a 0.8% agarose/EtBr gel:

Vector	Enzymes	Fragments
pTet-Off Advanced	EcoRI	7.1 kb
	BamHI	4.5 & 2.6 kb

- A₂₆₀/A₂₈₀: 1.8–2.0

It is certified that this product meets the above specifications, as reviewed and approved by the Quality Department.

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Our products are to be used for **Research Use Only**. They may not be used for any other purpose, including, but not limited to, use in humans, therapeutic or diagnostic use, or commercial use of any kind. Our products may not be transferred to third parties, resold, modified for resale, or used to manufacture commercial products or to provide a service to third parties without our prior written approval.

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STATEMENT 42

Use of the Tetracycline controllable expression systems (the "Tet Technology") is covered by a series of patents including U.S. Patent # 8383364, # 9181556, European patents EP # 1954811, #2352833 and corresponding patent claims outside these regions which are proprietary to TET Systems GmbH & Co. KG. Academic research institutions are granted an automatic license with the purchase of this product to use the Tet Technology only for internal, academic research purposes, which license specifically excludes the right to sell, or otherwise transfer, the Tet Technology or its component parts to third parties. Notwithstanding the above, academic and not-for profit research institutions whose research using the Tet Technology is sponsored by for profit organizations, which shall receive ownership to any data and results stemming from the sponsored research, shall need a commercial license agreement from TET Systems in order to use the Tet Technology. In accepting this license, all users acknowledge that the Tet Technology is experimental in nature. TET Systems GmbH & Co. KG makes no warranties, express or implied or of any kind, and hereby disclaims any warranties, representations, or guarantees of any kind as to the Tet Technology, patents, or products. All others are invited to request a license from TET Systems GmbH & Co. KG prior to purchasing these reagents or using them for any purpose. Takara Bio USA, Inc. is required by its licensing agreement to submit a report of all purchasers of the Tet-controllable expression system to TET Systems.

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or use the electronic licensing request form via <http://www.tetsystems.com/ip-licensing/licensing/for-profit-research>

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