Certificate of Analysis

pTet-On Advanced Vector

Catalog No.	Amount	Lot Number
631069	20 µg	Specified on product label.

Description

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

The Tet-On 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-On Advanced, which accumulates to high levels. Stable Tet-On Advanced cell lines can be generated by transfecting the plasmid and selecting for G418-resistant clones.

Package Contents

- 20 µg pTet-On Advanced Vector

Storage Conditions

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

Shelf Life

- 1 year from date of receipt under proper storage conditions.

Storage Buffer

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

Concentration

- 500 ng/µl

Shipping Conditions

- Dry ice (–70°C)

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(050918)

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Product Documents

Documents for our products are available for download at **takarabio.com/manuals**
The following documents apply to this product:

- pTet-On Advanced Vector Information (PT3899-5)

Propagation in *E. coli*

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

Quality Control Data

Plasmid Identity & Purity

- The identity of this plasmid was verified by electrophoresis on an agarose/EtBr gel after digestion with the indicated enzymes.

Vector	Enzyme(s)	Size (kb)
pTet-On Advanced	EcoRI	7.1
	BamHI	4.5 & 2.6

- A_{260}/A_{280}: 1.8–2.0

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

Notice to Purchaser

pTet-On Advanced Vector

CATALOG NO.

631069

NOTICE TO PURCHASER:

Our products are to be used for research purposes only. They may not be used for any other purpose, including, but not limited to, use in drugs, in vitro diagnostic purposes, therapeutics, or in humans. 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 prior written approval of Takara Bio USA, Inc.

Your use of this product is also subject to compliance with the licensing requirements listed below and described on the product´s web page at http://www.takarabio.com. It is your responsibility to review, understand and adhere to any restrictions imposed by these statements.

STATEMENT 42

Use of the Tetracycline controllable expression systems (the "Tet Technology") is covered by a series of patents including U.S. Patent # 7541446, # 8383364, # 9181556 , European patents EP # 1200607, # 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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Notice to Purchaser

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

TRADEMARKS:

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