Tetracycline Hydrochloride

Catalog Number A39246

Pub. No. MAN0018619 **Rev.** A.0

WARNING! Read the Safety Data Sheets (SDSs) and follow the handling instructions. Wear appropriate protective eyewear, clothing, and gloves. Safety Data Sheets (SDSs) are available from **thermofisher.com/support**.

Product description

Tetracycline is a yellow, odorless, crystalline powder. It is commonly used as an agent to activate gene expression from an inducible expression plasmid in engineered cells expressing the tetracycline repressor protein. Tetracycline Hydrochloride is the hydrochloride salt of tetracycline.

For detailed instructions on using Tetracycline Hydrochloride to induce expression of your protein of interest as part of the Expi293[™] Expression System, refer to *Expi293[™] Expression System User Guide* (MAN0007814) at **thermofisher.com**.

Contents and storage

Content	Amount	Storage
Tetracycline Hydrochloride	500 mg	Protect from light and moisture
		Store powder at room temperature. After reconstitution in solvent, store at -20°C

Specifications

CAS number	64–75–5
MDL number	MFCD00078142
Molecular weight	480.91
Formula	C ₂₂ H ₂₄ N ₂ O ₈ -HCl
Melting point	220–223°C
Assay (titration ex chloride)	>95.0%
Loss on drying	≤ 2.0%
Optical rotation	$-247^{\circ} \pm 8^{\circ}$ (c=1, 0.1 M HCl, dry weight basis)
Solubility	Water, DMSO, methano, ethanol For cell culture applications, we recommend reconstituting in water
Tetracycline structure	HO CH ₃ HO HO HO HO HO HO HO HO HO HO

Storage guidelines

- After reconstitution in water, store tetracycline stock solutions at -20°C
- Do not subject tetracycline stock solution to multiple freeze thaw cycles (do not store in a frost-free freezer).
- After thawing, discard any unused portion of the tetracycline solution. Do not refreeze.

Limited product warranty

Life Technologies Corporation and/or its affiliate(s) warrant their products as set forth in the Life Technologies' General Terms and Conditions of Sale at www.thermofisher.com/us/en/home/global/terms-and-conditions.html. If you have any questions, please contact Life Technologies at www.thermofisher.com/support.





Life Technologies Corporation | 5781 Van Allen Way | Carlsbad, CA 92008 For descriptions of symbols on product labels or product documents, go to **thermofisher.com/symbols-definition**.

The information in this guide is subject to change without notice.

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Revision	Date	Description
A.0	14 April 2019	New document.

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