

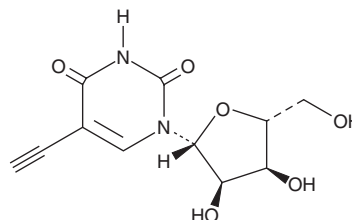
# PRODUCT INFORMATION



## 5-Ethynyluridine

Item No. 34391

**CAS Registry No.:** 69075-42-9  
**Formal Name:** 1-((2R,3R,4S,5R)-3,4-dihydroxy-5-(hydroxymethyl)tetrahydrofuran-2-yl)-5-ethynylpyrimidine-2,4(1H,3H)-dione  
**Synonym:** Click Tag™ 5-Ethynyluridine  
**MF:** C<sub>11</sub>H<sub>12</sub>N<sub>2</sub>O<sub>6</sub>  
**FW:** 268.2  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 225, 288 nm  
**Supplied as:** A solid  
**Storage:** -20°C  
**Stability:** ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

5-Ethynyluridine is supplied as a solid. A stock solution may be made by dissolving the 5-ethynyluridine in the solvent of choice, which should be purged with an inert gas. 5-Ethynyluridine is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of 5-ethynyluridine in these solvents is approximately 10 mg/ml.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of 5-ethynyluridine can be prepared by directly dissolving the solid in aqueous buffers. The solubility of 5-ethynyluridine in PBS (pH 7.2) is approximately 5 mg/ml. We do not recommend storing the aqueous solution for more than one day.

### Description

5-Ethynyluridine is a clickable form of uridine.<sup>1</sup> It is incorporated into cellular RNA, but not DNA, and has been used to detect transcription *in vitro* and *in vivo*.

### Reference

1. Jao, C.Y. and Salic, A. Exploring RNA transcription and turnover *in vivo* by using click chemistry. *Proc. Natl. Acad. Sci. USA* **105**(41), 15779-15784 (2008).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

#### WARRANTY AND LIMITATION OF REMEDY

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