

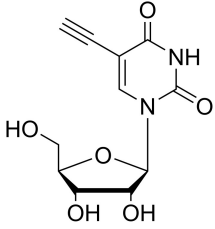
EU (5-ethynyl uridine) (A270203)

Specifications:

Name:	EU (5-ethynyl uridine)
Description:	<p>5-ethynyl uridine (EU) is a commonly used molecular biology reagent for RNA synthesis studies. EU is readily taken up by living cells and phosphorylated through the pyrimidine salvage pathway. Generated 5-ethynyl uridine-5'-triphosphate is incorporated by RNA polymerases I, II, and III into de novo RNA instead of uridine, but not into DNA. EU-labeled nascent cellular RNA can be detected quickly and with high sensitivity via Click Chemistry following fluorescent visualization. Alkyne group attached at the 5-position of uridine in modified RNA reacts with dye or biotin azides via Cu(I)-catalyzed azide-alkyne cycloaddition (CuAAC). Labeled RNA can be detected with different methods, e.g. fluorescent microscopy or flow cytometry, which allows estimating transcriptional levels in the cells. 5-ethynyl uridine has an advantage over its analog, 5-bromouridine, because azide-containing dyes are very small in size and exhibit better membrane permeability compared to antibodies used for the detection of 5-bromouridine. Thus, the Click Chemistry approach allows whole-mount staining of large samples like organs or tissue fragments.</p>
CAS Number:	69075-42-9
Purity:	95% (by ¹ H NMR and HPLC-MS).
Molecular Formula:	C ₁₁ H ₁₂ N ₂ O ₆
Molecular Weight:	268.22 kDa
Product Form:	Off white solid.
Solubility:	Good in water, DMSO, and DMF.
Storage:	Shipped at room temperature. Upon delivery, store in the dark at -20°C. Avoid prolonged exposure to light.
Disclaimer:	This product is for research use only. It is not intended for diagnostic or therapeutic use.

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Images:



Structure of 5-Ethynyluridine.