

Product Datasheet

5-Ethynyl-cytidine (5-EC) (orb532336)

Catalog Number	orb532336
Category	Small Molecules
Description	Ethynyl-labeled cytidine (5-EC) can be used as a replacement for BrU (5-Bromouridine) to measure de novo RNA synthesis in proliferating cells. 5-EC is cell permeable and incorporates into nascent RNA instead of its natural analog cytidine. The resulting ethynyl-functionalized RNA can subsequently be detected via Cu(I)-catalyzed click chemistry that offers the choice to introduce a Biotin group (via Azides of Biotin) for subsequent purification tasks or a fluorescent group (via Azides of fluorescent dyes) for subsequent microscopic imaging.
Form/Appearance	solid; Color: white to off-white
Purity	≥ 99% (HPLC)
MW	Theoretical MW: 267.24 g/mol; Detected MW: 267.09 g/mol
Application notes	RNA synthesis monitoring. Spectroscopic Propertie: λ _{max} 294 nm, ε 8.5 L mmol ⁻¹ cm ⁻¹ (Tris-HCl, pH 7.5).
Solubility (25°C)	DMSO
CAS Number	65223-78-1
Formula	C ₁₁ H ₁₃ N ₃ O ₅
SMILES	<chem>n1(cc(c(nc1=O)N)C#C)[C@H]1[C@@H]([C@@H]([C@H](O1)CO)O)O</chem>
Storage	store at -20 °C
Hazard Information	Non-Toxic
Note	For research use only
Expiration Date	12 months from date of receipt.

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