

Product Datasheet

5-Vinyl-2'-deoxyuridine (5-VdU) (orb532301)

Catalog Number	orb532301
Category	Small Molecules
Description	5-VdU (5-Vinyl-2'-deoxyuridine) can be used as a replacement for BrdU (5-Bromo-2'-deoxyuridine) or the copper-catalyst requiring 5-EdU (5-Ethynyl-2'-deoxyuridine) to measure de novo DNA synthesis during the S-phase of the cell cycle. 5-VdU is cell permeable and incorporates into replicating DNA instead of its natural analog thymidine. The resulting vinyl-functionalized DNA can subsequently be detected via Cu(I)-free Alkene-Tetrazine Ligation that offers the choice to introduce a Biotin group (via Tetrazines of Biotin) for subsequent purification tasks or a fluorescent group (via Tetrazines of fluorescent dyes) for subsequent microscopic imaging.
Form/Appearance	solid; Color: white to off-white
Purity	98% (HPLC)
MW	Theoretical MW: 254.24 g/mol; Detected MW: 254.09 g/mol
Application notes	DNA synthesis monitoring. Spectroscopic Propertie : max 292 nm, 9.2 L mmol ⁻¹ cm ⁻¹ , (Methanol).
Solubility (25°C)	DMSO, methanol
CAS Number	55520-67-7
Formula	C ₁₁ H ₁₄ N ₂ O ₅
SMILES	<chem>n1(cc(c(=O)[nH]c1=O)C=C)[C@H]1C[C@@H]([C@H](O1)CO)O</chem>
Storage	store at -20 C
Note	For research use only

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Expiration Date 12 months from date of receipt.

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