

Product Datasheet

5-Azidomethyl-2'-deoxyuridine (5-AmdU) (orb532314)

Catalog Number	orb532314
Category	Small Molecules
Description	5-AmdU (5-Azidomethyl-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-AmdU is cell permeable and incorporates into replicating DNA instead of its natural analog thymidine. The resulting azide-functionalized DNA can subsequently be detected via Cu(I)-catalyzed (CuAAC) or Cu(I)-free Click Chemistry that offers the choice to: introduce a Biotin group for subsequent purification tasks (via Alkynes of Biotin or DBCO-functionalized Biotin, respectively); introduce a fluorescent group for subsequent microscopic imaging (via Alkynes of fluorescent dyes or DBCO-functionalized fluorescent dyes, respectively).
Form/Appearance	solid; Color: white to off-white
Purity	90% (HPLC)
MW	Theoretical MW: 283.24 g/mol; Detected MW: 283.09 g/mol
Application notes	DNA synthesis monitoring. Spectroscopic Propertie : max 263 nm, 9.7 L mmol ⁻¹ cm ⁻¹ .
Solubility (25°C)	DMSO, methanol
Formula	C ₁₀ H ₁₃ N ₅ O ₅
SMILES	<chem>O=c1c(cnc(=O)[nH]1)[C@@H]1O[C@H](CO)[C@@H](O)C1CN=[N+]=[N-]</chem>
Storage	store at -20 C

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Note	For research use only
Expiration Date	12 months from date of receipt.

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