

Product Datasheet

5-Ethynyl-2'-deoxyuridine (5-EdU) (orb1734893)

Catalog Number	orb1734893
Category	Small Molecules
Description	5-EdU (5-Ethynyl-2'-deoxyuridine) can be used as a replacement for BrdU (5-Bromo-2'-deoxyuridine) to measure de novo DNA synthesis during the S-phase of the cell cycle. 5-EdU is cell permeable and incorporates into replicating DNA instead of its natural analog thymidine. The resulting ethynyl-functionalized DNA 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	98% (HPLC)
MW	Theoretical MW: 252.23 g/mol; Detected MW: 252.07 g/mol
Application notes	DNA synthesis monitoring. Spectroscopic Propertie: max 288 nm, 12.0 L mmol ⁻¹ cm ⁻¹ (Tris-HCl, pH 7.5).
Solubility (25°C)	DMSO, up to 200 mM (at room temperature) in 1x PBS or water by heating the obtained suspension for 1 minute by 70 C
CAS Number	61135-33-9
Formula	C ₁₁ H ₁₂ 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. store dry and under inert gas. Short term exposure (up to 1 week cumulative) to ambient temperature possible
Note	For research use only

Biorbyt Ltd.

7 Signet Court, Swann Road
Cambridge
CB5 8LA
United Kingdom

Email: info@biorbyt.com, support@biorbyt.com
Phone: [+44 \(0\)1223 859353](tel:+44(0)1223859353) | Fax: [+1 \(415\) 651-8558](tel:+1(415)651-8558)

Biorbyt LLC

68 TW Alexander Drive
Research Triangle Park
Durham
NC 27713
United States

Email: info@biorbyt.com, support@biorbyt.com
Phone: [+1 \(415\) 906-5211](tel:+1(415)906-5211) | Fax: [+1 \(415\) 651-8558](tel:+1(415)651-8558)

Expiration Date

12 months from date of receipt.

Biorbyt Ltd.

7 Signet Court, Swann Road
Cambridge
CB5 8LA
United Kingdom

Email: info@biorbyt.com, support@biorbyt.com

Phone: [+44 \(0\)1223 859353](tel:+44(0)1223859353) | Fax: [+1 \(415\) 651-8558](tel:+1(415)651-8558)

Biorbyt LLC

68 TW Alexander Drive
Research Triangle Park
Durham
NC 27713
United States

Email: info@biorbyt.com, support@biorbyt.com

Phone: [+1 \(415\) 906-5211](tel:+1(415)906-5211) | Fax: [+1 \(415\) 651-8558](tel:+1(415)651-8558)