

## Product Datasheet

### 5-Ethynyl-2'-deoxycytidine (5-EdC) (orb532418)

<b>Catalog Number</b>	orb532418
<b>Category</b>	Small Molecules
<b>Description</b>	Ethynyl-labeled deoxycytidine (5-EdC) 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-EdC 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 (Azides of Biotin) for subsequent purification tasks or a fluorescent group (Azides of fluorescent dyes) for subsequent microscopic imaging.
<b>Form/Appearance</b>	solid; Color: off-white
<b>Purity</b>	99% (HPLC)
<b>MW</b>	Theoretical MW: 251.24 g/mol; Detected MW: 251.09 g/mol
<b>Application notes</b>	DNA synthesis monitoring. <b>Spectroscopic Propertie:</b> max 291 nm, 8.5 L mmol <sup>-1</sup> cm <sup>-1</sup> (Tris-HCl, pH 7.5).
<b>Solubility (25°C)</b>	DMSO
<b>CAS Number</b>	69075-47-4
<b>Formula</b>	C <sub>11</sub> H <sub>13</sub> N <sub>3</sub> O <sub>4</sub>
<b>SMILES</b>	<chem>n1(cc(c(nc1=O)N)C#C)[C@H]1C[C@@H]([C@H](O1)CO)O</chem>
<b>Storage</b>	store at -20 C
<b>Note</b>	For research use only
<b>Expiration Date</b>	12 months from date of receipt.

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