New England Biolabs  
Product Specification

**Product Name:** 5-methyl-dCTP  
**Catalog #:** N0356S  
**Concentration:** 10 mM  
**Shelf Life:** 36 months  
**Storage Temp:** -20°C  
**Storage Conditions:** Supplied in Milli-Q® water as a triethylammonium salt  
**Specification Version:** PS-N0356S v2.0  
**Effective Date:** 02 Jul 2021

<table>
<thead>
<tr>
<th>Assay Name/Specification (minimum release criteria)</th>
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<tbody>
<tr>
<td><strong>Functional Testing (Methylase Protection)</strong> - A 500 bp DNA amplicon was generated in two PCR reactions using Vent DNA Polymerase, dATP, dGTP, dTTP, and either dCTP or 5-methyl-dCTP. The 500 bp fragments from each reaction were digested with 5mC methyl sensitive enzymes HpaII and MspI and then electrophoresed on an agarose gel. The 5-methyl-dCTP product failed to be cut by these enzymes, whereas the dCTP product was digested by both enzymes.</td>
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<tr>
<td><strong>Physical Purity (HPLC)</strong> - 5-methyl-dCTP is ( \geq 95% ) pure as determined by HPLC analysis.</td>
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Derek Robinson  
Director, Quality Control  

Date 02 Jul 2021

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