


Specification

5-Bromo-2'-Deoxyuridine *BioChemica*

A2139

Physical Description:	Solid
Product Code:	A2139
Product Name:	5-Bromo-2'-Deoxyuridine <i>BioChemica</i>
Specifications:	<p>Assay (HPLC): min. 99 %</p> <p>$\alpha_{20^{\circ}\text{C/D}}$; 1 %, H₂O: +22° - +24°</p> <p>Heavy metals (as Pb): max. 0.001 %</p> <p>Water (K.F.): max. 1 %</p>
Hazard pictograms	
WGK:	3
Storage:	<p>2-8°C</p> <p>protected from light</p>
Signal Word:	Danger
GHS Symbols:	GHS08
H Phrases:	<p>H340</p> <p>H361</p>
P Phrases:	<p>P201</p> <p>P281</p> <p>P308+P313</p>
Molecular Formula:	C ₉ H ₁₁ BrN ₂ O ₅
M:	307.11 g/mol
CAS:	59-14-3

AppliChem GmbH

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Specification

5-Bromo-2'-Deoxyuridine *BioChemica*

A2139

EINECS:	200-415-9
CS:	29349990
Comment <p>Bromodeoxyuridine is a thymidine analogue, which is introduced into DNA instead of thymidine during DNA synthesis. It is used for the examination of DNA synthesis, cell cycle or cell proliferation processes (2-4). Especially for the DNA synthesis, bromodeoxyuridine is a non-radioactive alternative to Trithium-labeled thymidine. BrdU- labeled DNA can easily be detected by the corresponding monoclonal antibodies (2, 4). Stability: We recommend to prepare stock solutions in bidistilled water just before use (0.1 mg/ml, ref. 5), because BrdU has a limited shelf life. In case of the storage of stock solutions, according to reference 3, following procedure is recommended: Dissolve 10 mg/ml BrdU in bidistilled water at room temperature and filter-sterilize. For an incubation of cells with BrdU for a longer period of time all solutions should be sterile. Aliquots are stored at -20°C. Stock solutions decompose after several months. If you observe a precipitate after thawing, warm the solution to 37°C and mix well. Protect solutions of BrdU from direct light.</p>	
Bibliography <p>(1)Bick, M.D. & Davidson, R.L. (1974) <i>Proc. Natl. Acad. Sci. USA</i> 71, 2082-2086Total substitution of Bromodeoxyuridine for Thymidine in the DNA of a Bromodeoxyuridine dependent cell line. (2)Dolbeare, F. <i>et al.</i> (1983) <i>Proc. Natl. Acad. Sci. USA</i> 80, 5573-5577Flow cytometric measurement of total DNA content and incorporated BrdU. (3)Böhmer, R.M. (1990) <i>Methods Cell Biol.</i> 33, 173-184Cell division analysis with Bromodeoxyuridine and Hoechst 33258-fluorescence. (4)Dolbeare, F. <i>et al.</i> (1990) <i>Methods Cell Biol.</i> 33, 207-216Using monoclonal antibodies in Bromodeoxyuridine-DNA analysis. (5)Crissman, H.A. & Steinkamp, J.A. (1990) <i>Methods Cell Biol.</i> 33, 199-206Detection of Bromodeoxyuridine-labeled cells by differential fluorescence analysis.</p>	

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