


Specification

Blasticidin S Hydrochloride *BioChemica*

A3784

Physical Description:	Solid
Product Code:	A3784
Product Name:	Blasticidin S Hydrochloride <i>BioChemica</i>
Specifications:	Assay (HPLC): min. 98 %
Hazard pictograms	
UN:	3462
Class/PG:	6.1/II
ADR:	6.1/II
IMDG:	6.1/II
IATA:	6.1/II
WGK:	1
Storage:	-20°C
Shipment:	dry ice
Signal Word:	Danger
GHS Symbols:	GHS06
H Phrases:	H300
P Phrases:	P264 P301+P310
Molecular Formula:	C ₁₇ H ₂₆ N ₈ O ₅ · HCl

AppliChem GmbH

Ottoweg 4 • D-64291 Darmstadt • Phone +49 6151 9357 0 • Fax +49 6151 9357 11 • info.de@itwreagents.com • www.itwreagents.com
CEO Joan Roget • Commerzbank Darmstadt • Bank 508 800 50 • Account 0186989900 IBAN DE24 5088 0050 0186 9899 00 • Swiftcode DRESDEFF508 • Finanzamt Darmstadt 07 228 16476 • Register court Darmstadt HRB Nr. 7340

Specification

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A3784

M:	458.91 g/mol
CAS:	3513-03-9
EINECS:	609-067-6
CS:	29419000
Index Nr.:	607-155-00-9
<p>Comment</p> <p>Blasticidin S belongs to the nucleoside antibiotics and has been isolated from <i>Streptomyces griseochromogenes</i>. It inhibits the protein synthesis in prokaryotes and eukaryotes by preventing the formation of the peptide binding. Meanwhile, several blasticidin-resistance genes have been isolated (one acetyl transferase [<i>bls</i>] and two deaminases [<i>bsr</i> and <i>BSD</i>]. The genes coding for the deaminases are used as selection markers. Blasticidin S hydrochloride is soluble in water or buffers (e. g. HEPES). The working concentration depends on the organism chosen. For <i>E. coli</i> a concentration of 50 - 100 µg/ml blasticidin S is applied, for mammalian cells only 3 to 10 µg/ml, in a few cases up to 30 µg/ml. Since the informations vary, it is recommended to determine the correct concentration for each cell line or organism. It is worth mentioning that high salt concentrations will inactivate blasticidin S. Therefore, for the selection of blasticidin S-resistant <i>E. coli</i>, the sodium chloride concentration has to be lowered from 10 to 5 g/L in LB broth / LB agar (10 g tryptone, 5 g yeast extract, 5 g NaCl per litre for the medium; additionally 15 g/L agar for the plates). Alternatively, the blasticidin concentration can be raised. Stability: Blasticidin S hydrochloride is shipped at ambient temperature and should be stored refrigerated upon arrival. The dry substance is stable for at least 2 years. It is recommended to filter-sterilize the solutions. A stock solution is prepared at a concentration of 50 mg/ml. The pH value should not exceed pH 7, because of inactivation of blasticidin S. Solutions are stable for approx. 2 weeks at +4°C and frozen (-20°C) for approx. 2 months. Do not repeatedly freeze/thaw solutions.</p>	

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