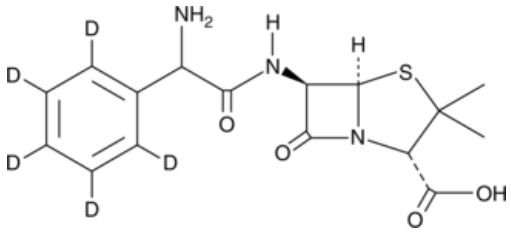
Product Data Sheet

Product Name: Ampicillin-d5
Cat. No.: GC46849

Chemical Properties

Cas. No.	1426173-65-0		
SMILES	O=C(N[C@@H]1C(N2[C@]1([H])SC(C)(C)[C@@H]2C(O)=O)=O)C(N)C3=C([2H])C([2H])=C([2H])C([2H])=C3[2H]		
Formula	C16H14D5N3O4S	M.Wt	354.4
Solubility	H_2O : 4.9 mg/mL (13.82 mM; ultrasonic and warming and adjust pH to 9 with NaOH and heat to 60°C)	Storage	Store at -20°C
General tips	For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20°C for several months.		
Shipping Condition	Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.		
Structure			

Background

Ampicillin-d_5 is intended for use as an internal standard for the quantification of ampicillin by GC- or LC-MS. Ampicillin is a broad-spectrum antibiotic with activity against Gram-positive and Gram-negative bacteria, including veterinary isolates of *S. pseudintermedius*, *S. aureus*, *E. coli*, *Pasteurella*, and *S. canis* (MIC_{50}s = 0.25, 0.5, 2, 0.12, and 0.25 µg/ml, respectively). [1] *In vivo*, ampicillin (80 mg/kg, i.v.) reduces cough frequency, tachypnea, dyspnea, and fever and increases survival in a baboon (*P. cynocephalus*) model of pneumococcal pneumonia.[2] Formulations containing ampicillin have been used to treat a variety of bacterial infections.

1.Awji, E.G., Damte, D., Lee, S.-J., et al.The in vitro activity of 15 antimicrobial agents against

Caution: Product has not been fully validated for medical applications. For research use only.
Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com
Address: 10292 Central Ave. #205, Montclair, CA, USA

bacterial isolates from dogsJ. Vet. Med. Sci.74(8)1091-1094(2012) 2.Reyes, L.F., Restrepo, M.I., Hinojosa, C.A., et al.A non-human primate model of severe pneumococcal pneumoniaPLoS One11(11)e0166092(2016)