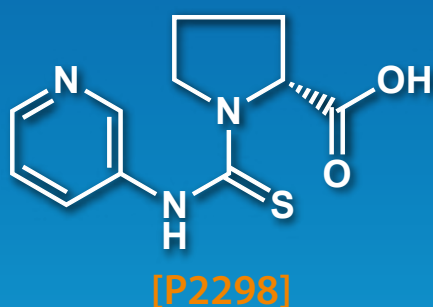


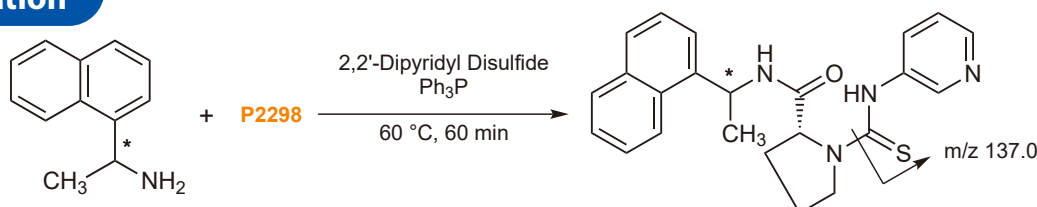
Chiral Derivatization Reagent for Enantiomeric Separation and Quantitative Determination of Chiral Amines



Advantages

- P2298-labeled chiral amines are useful for the enantiomeric separation and the quantitative determination in LC-ESI-MS/MS
- When enantiomeric mixtures of amines are employed, the diastereomeric labeled amines are given
- The SRM (selected reaction monitoring) chromatograms at a characteristic product-ion (m/z 137.0) derived from P2298 in MS/MS enable highly sensitive detection

Application



10 mM **P2298** in acetonitrile (20 μ L) is reacted at 60 °C for 60 min with chiral amines (10 μ M) in the presence of 10 mM triphenylphosphine in acetonitrile (20 μ L) and 10 mM 2,2'-dipyridyl disulfide in acetonitrile (20 μ L). After removal of the solvent under a gentle nitrogen stream, the residues are re-dissolved in the initial mobile phase, and then an aliquot (2 μ L) is subjected to UHPLC-ESI-MS/MS. The separations of the pair of diastereomers for chiral amines are performed by isocratic elution using water/acetonitrile containing 0.1% formic acid. The SRM chromatograms of each pair of diastereomers are obtained from the monitoring ion at m/z 137.0, derived from the MS transition of the corresponding protonated-molecular ion, $[M+H]^+$.

References R. Nagao, H. Tsutsui, T. Mochizuki, T. Takayama, T. Kuwabara, J. Z. Min, K. Inoue, K. Todoroki, T. Toyooka, *J. Chromatogr. A* **2013**, 1296, 111.

(R)-PyT-C

100mg [P2298]

Related Products

2,2'-Dipyridyl Disulfide
Triphenylphosphine

5g / 25g / 250g [D1114]
25g / 100g / 500g [T0519]

Ordering and Customer Service

TCI AMERICA

Tel : 800-423-8616 / 503-283-1681
Fax : 888-520-1075 / 503-283-1987
E-mail : Sales-US@TCIchemicals.com

TCI EUROPE N.V.

Tel : +32 (0)3 735 07 00
Fax : +32 (0)3 735 07 01
E-mail : Sales-EU@TCIchemicals.com

TCI Deutschland GmbH

Tel : +49 (0)6196 64053-00
Fax : +49 (0)6196 64053-01
E-mail : Sales-DE@TCIchemicals.com

Tokyo Chemical Industry UK Ltd.

Tel : +44 (0)1865 784560
Fax : +44 (0)1865 784561
E-mail : Sales-UK@TCIchemicals.com

TCI Chemicals (India) Pvt. Ltd.

Tel : 1800 425 7889 / 044-2262 0909
Fax : 044-2262 8902
E-mail : Sales-IN@TCIchemicals.com

梯希爱(上海)化成工业发展有限公司

Tel : 800-988-0390 / 021-67121386
Fax : 021-6712-1385
E-mail : Sales-CN@TCIchemicals.com

TOKYO CHEMICAL INDUSTRY CO., LTD.

Tel : +81 (0)3-5640-8878
Fax : +81 (0)3-5640-8902
E-mail : globalbusiness@TCIchemicals.com

Availability, price or specification of the listed products are subject to change without prior notice. Reproduction forbidden without the prior written consent of Tokyo Chemical Industry Co., Ltd.