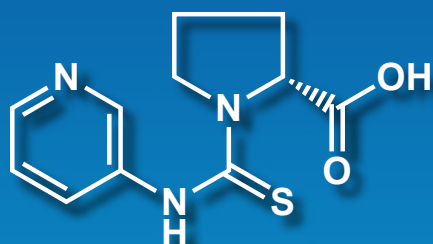


# Chiral Derivatization Reagent for Enantiomeric Separation and Quantitative Determination of Chiral Amines

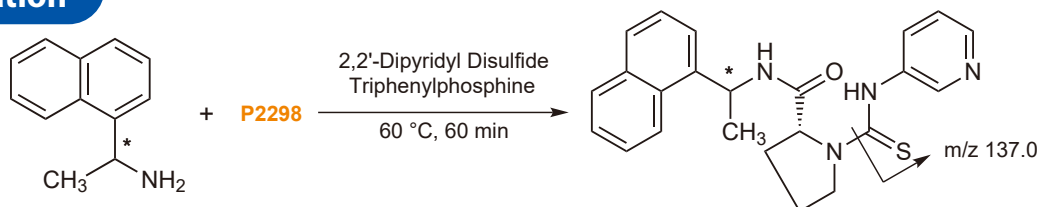


(R)-PyT-C  
100mg  
[P2298]

## 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  $\mu$ L) is reacted at 60 °C for 60 min with chiral amines (10  $\mu$ M) in the presence of 10 mM triphenylphosphine in acetonitrile (20  $\mu$ L) and 10 mM 2,2'-dipyridyl disulfide in acetonitrile (20  $\mu$ 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  $\mu$ 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,  $[M+H]^+$ .

**Reference** R. Nagao, H. Tsutsui, T. Mochizuki, T. Takayama, T. Kuwabara, J. Z. Min, K. Inoue, K. Todoroki, T. Toyo'oka, *J. Chromatogr. A* **2013**, 1296, 111.  
<https://doi.org/10.1016/j.chroma.2013.03.019>

## 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 78 45 60  
E-mail : Sales-UK@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 (India) Pvt. Ltd.

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

### TOKYO CHEMICAL INDUSTRY CO., LTD.

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

• Chemicals itemized in this brochure are for research and testing use only. Please avoid use other than by chemically knowledgeable professionals. • Information such as listed products and its specifications and so on are subject to change without prior notice. • The contents may not be reproduced or duplicated in whole or in part without permission of Tokyo Chemical Industry Co., Ltd.