

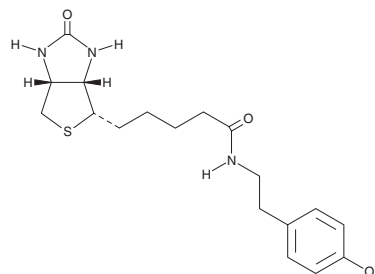
PRODUCT INFORMATION



Biotinyl Tyramide

Item No. 27997

CAS Registry No.: 41994-02-9
Formal Name: (3a*S*,4*S*,6a*R*)-hexahydro-*N*-[2-(4-hydroxyphenyl)ethyl]-2-oxo-1*H*-thieno[3,4-*d*]imidazole-4-pentanamide
MF: C₁₈H₂₅N₃O₃S
FW: 363.5
Purity: ≥98%
UV/Vis.: λ_{max}: 225, 280 nm
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Biotinyl tyramide is supplied as a solid. A stock solution may be made by dissolving the biotinyl tyramide in the solvent of choice, which should be purged with an inert gas. Biotinyl tyramide is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of biotinyl tyramide in these solvents is approximately 30 mg/ml.

Biotinyl tyramide is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, biotinyl tyramide should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Biotinyl tyramide has a solubility of approximately 0.16 mg/ml in a 1:5 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Biotinyl tyramide is a reagent that has been used for tyramide signal amplification (TSA) *via* catalyzed reporter deposition (CARD).¹ In CARD, a reporter enzyme, such as horseradish peroxidase (HRP) conjugated to a secondary antibody, is bound to the target of interest and catalyzes the covalent deposition of biotinyl tyramide to the sample. The sample is then probed by a detector, such as streptavidin-HRP, allowing detection *via* chromogenic or fluorescent methods. Biotinyl tyramide has been used in immunohistochemistry, ELISA, Western blot, and *in situ* hybridization applications.^{1,2}

References

1. Bobrow, M.N., Litt, G.J., Shaughnessy, K.J., *et al.* The use of catalyzed reporter deposition as a means of signal amplification in a variety of formats. *J. Immunol. Methods* **150(1-2)**, 145-149 (1992).
2. Kadkol, S.S., Gage, W.R., and Pasternack, G.R. *In situ* hybridization-Theory and practice. *Mol. Diagn.* **4(3)**, 169-183 (1999).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent *via* email to your institution.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 11/17/2022

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM