

**Product Name:** Biotinyl Tyramide

**Catalog No.:** 6241

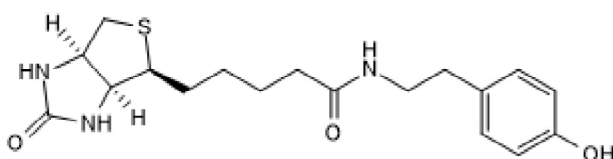
**Batch No.:** 3

CAS Number: 41994-02-9

IUPAC Name: (3a*S*,4*S*,6a*R*)-Hexahydro-*N*-[2-(4-hydroxyphenyl)ethyl]-2-oxo-1*H*-thieno[3,4-*d*]imidazole-4-pentanamide

## 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>18</sub>H<sub>25</sub>N<sub>3</sub>O<sub>3</sub>S.  
**Batch Molecular Weight:** 363.47  
**Physical Appearance:** White solid  
**Solubility:** DMSO to 100 mM  
**Storage:** Store at -20°C  
**Batch Molecular Structure:**



## 2. ANALYTICAL DATA

**HPLC:** Shows 98.9% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure

**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	59.48	6.93	11.56
Found	59.38	6.92	11.46

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

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**Description:**

Biotinyl Tyramide is a reagent widely used for signal amplification in IHC and fluorescent in situ hybridization (ISH) and APEX proximity labeling. HRP catalyzes localized deposition of multiple biotinyl tyramide molecules (catalyzed reporter deposition, CARD), which can be detected using a labeled streptavidin conjugate. The localization of deposition around HRP leads to good resolution. Suitable for either fluorescence or chromogenic detection. Biotinyl Tyramide is used as a substrate for APEX proximity labeling.

**Physical and Chemical Properties:**

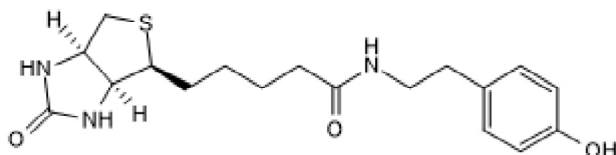
Batch Molecular Formula: C<sub>18</sub>H<sub>25</sub>N<sub>3</sub>O<sub>3</sub>S.

Batch Molecular Weight: 363.47

Physical Appearance: White solid

**Minimum Purity:** ≥98%

**Batch Molecular Structure:**



**References:**

**McKay et al** (1997) Amplification of fluorescent *in situ* hybridisation signals in formalin fixed paraffin wax embedded sections of colon tumour using biotinylated tyramide. *Mol.Pathol.* **50** 322. PMID: 9536283.

**Bobrow et al** (1989) Catalyzed reporter deposition, a novel method of signal amplification. Application to immunoassays. *J.Immunol.Methods* **125** 279. PMID: 2558138.

**Storage:** Store at -20°C

**CAUTION** - This product is light sensitive and we recommend that the solid material and any solutions obtained are protected from exposure to light.

**Solubility & Usage Info:**

DMSO to 100 mM

**Stability and Solubility Advice:**

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. \*Unless contradicted by product-specific protocols or instructions, our standard recommendations apply:

**SOLIDS:** Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

**SOLUTIONS:** We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

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