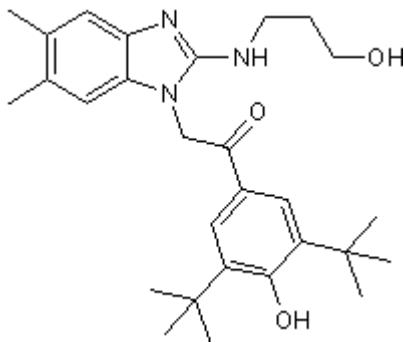


**Certificate of Analysis**[www.tocris.com](http://www.tocris.com)**Product Name:** CID 2858522**Catalog No.:** 4246**Batch No.:** 1**CAS Number:** 758679-97-9**IUPAC Name:** 1-[3,5-Bis(1,1-dimethylethyl)-4-hydroxyphenyl]-2-[2-[(3-hydroxypropyl)amino]-5,6-dimethyl-1*H*-benzimidazol-1-yl]ethanone**1. PHYSICAL AND CHEMICAL PROPERTIES****Batch Molecular Formula:** C<sub>28</sub>H<sub>39</sub>N<sub>3</sub>O<sub>3</sub>.1/4H<sub>2</sub>O**Batch Molecular Weight:** 470.13**Physical Appearance:** Pale yellow solid**Solubility:** DMSO to 20 mM  
ethanol to 20 mM**Storage:** Store at -20°C**Batch Molecular Structure:****2. ANALYTICAL DATA****HPLC:** Shows 99% purity**<sup>1</sup>H NMR:** Consistent with structure**Mass Spectrum:** Consistent with structure**Microanalysis:** Carbon Hydrogen Nitrogen

Theoretical 71.54 8.47 8.94

Found 71.24 8.29 9.06

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## Product Information

[www.tocris.com](http://www.tocris.com)**Product Name:** CID 2858522**Catalog No.:** 4246**Batch No.:** 1

CAS Number: 758679-97-9

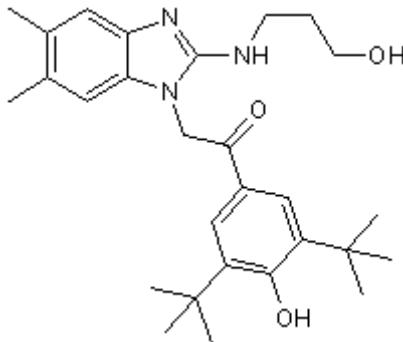
IUPAC Name: 1-[3,5-Bis(1,1-dimethylethyl)-4-hydroxyphenyl]-2-[2-[(3-hydroxypropyl)amino]-5,6-dimethyl-1*H*-benzimidazol-1-yl]ethanone**Description:**

Selectively inhibits protein kinase C (PKC)-induced activation of the NF- $\kappa$ B pathway ( $IC_{50} < 0.1$   $\mu$ M for PMA-stimulated IL-8 production). Inhibits antigen receptor-stimulated NF- $\kappa$ B activation in chronic lymphocytic leukemia (CLL) B cells. Does not inhibit other NF- $\kappa$ B pathways, including that activated by tumor necrosis factor (TNF).

**Physical and Chemical Properties:**Batch Molecular Formula:  $C_{28}H_{39}N_3O_3 \cdot \frac{1}{2}H_2O$ 

Batch Molecular Weight: 470.13

Physical Appearance: Pale yellow solid

**Minimum Purity:** >98%**Batch Molecular Structure:****Storage:** Store at -20°C**Solubility & Usage Info:**DMSO to 20 mM  
ethanol to 20 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. Our standard recommendations are:

**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.

**References:**

**Peddibhotla** *et al* (2010) Inhibition of protein kinase C-driven NF- $\kappa$ B activation: synthesis, SAR, and pharmacological profiling of pathway specific benzimidazole probe molecules. *J.Med.Chem.* **53** 4793. PMID: 20481485.

**Shi** *et al* (2010) Chemical biology strategy reveals pathway-selective inhibitor of NF- $\kappa$ B activation induced by protein kinase C and antigen receptors. *ACS Chem.Bio.* **5** 287.

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