Certificate of Analysis

Product Name: **Thalidomide-Cyanine 5** **Catalog No.: 7288** **Batch No.: 1**

IUPAC Name: 2-((1*E*,3*E*)-5-((*E*)-1-(6-((4-(2-((2-(2,6-Dioxopiperidin-3-yl)-1,3-dioxoisoindolin-4-yl)oxy)acetamido)butyl)amino)-6-oxohexyl)-3,3-dimethyl-5-sulfoindolin-2-ylidene)penta-1,3-dien-1-yl)-1-ethyl-3,3-dimethyl-3*H*-indol-1-ium-5-sulfonate

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{52}H_{60}N_6O_{13}S_2$

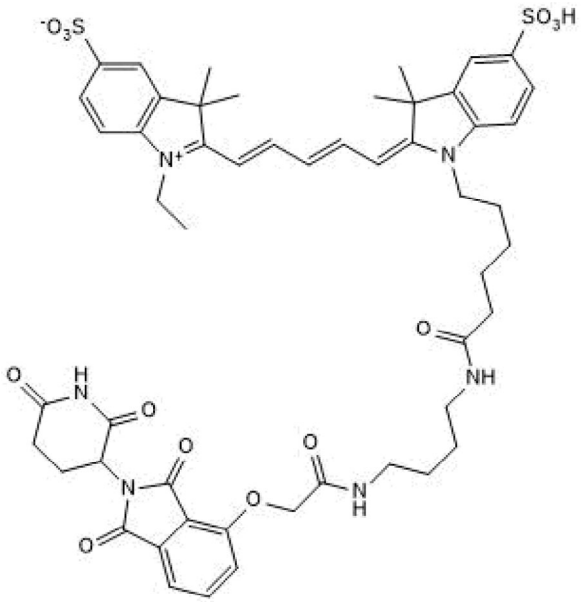
Batch Molecular Weight: 1041.2

Physical Appearance: Blue solid

Solubility: DMSO to 20 mM

Storage: Store at -20°C

Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows >90% purity

^{1}H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

UV Spectrum: Consistent with structure

λ_{max}: 650 nm (PBS buffer pH 7.4)

λ_{ex}: 652 nm (PBS buffer pH 7.4)

λ_{em}: 665 nm (PBS buffer pH 7.4)

bio-techne.com
info@bio-techne.com
techsupport@bio-techne.com

North America
Tel: (800) 343 7475

China
info.cn@bio-techne.com
Tel: +86 (21) 52380373

Europe Middle East Africa
Tel: +44 (0)1235 529449

Rest of World
www.tocris.com/distributors
Tel:+1 612 379 2956

Product Name: **Thalidomide-Cyanine 5** **Catalog No.: 7288** **1**

IUPAC Name: 2-((1*E*,3*E*)-5-((*E*)-1-(6-((4-(2-((2-(2,6-Dioxopiperidin-3-yl)-1,3-dioxoisoindolin-4-yl)oxy)acetamido)butyl)amino)-6-oxohexyl)-3,3-dimethyl-5-sulfoindolin-2-ylidene)penta-1,3-dien-1-yl)-1-ethyl-3,3-dimethyl-3*H*-indol-1-ium-5-sulfonate

Description:

Thalidomide-Cyanine 5 is a fluorescent probe for cereblon E3 ligases. Binds with high affinity to DDB1-CRBN. Suitable for use in TR-FRET.

Physical and Chemical Properties:

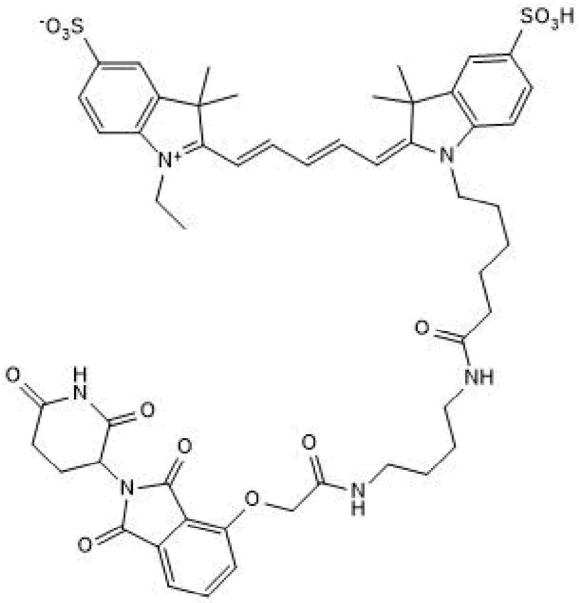
Batch Molecular Formula: $C_{52}H_{60}N_6O_{13}S_2$

Batch Molecular Weight: 1041.2

Physical Appearance: Blue solid

Minimum Purity: ≥90%

Batch Molecular Structure:



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 20 mM

This product is supplied in lyophilized form. It may appear as a solid, gel or film and be very hard to visualize. Solutions should be made by adding solvent directly to the vial. The vial should then be vortexed vigorously to ensure the product has completely dissolved.

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.

References:

Chessum *et al* (2018) Demonstrating in-cell target engagement using a pirin protein degradation probe (CCT367766). J.Med.Chem. ***61*** 918. PMID: 29240418.

Cavadini *et al* (2016) Cullin-RING ubiquitin E3 ligase regulation by the COP9 signalosome. Nature ***531*** 598. PMID: 27029275.

Petzold *et al* (2016) Structural basis of lenalidomide-induced CK1α degradation by the CRL4^{CRBN} ubiquitin ligase. Nature ***532*** 127. PMID: 26909574.