# biotechne<sup>®</sup> TOCRIS

# **Certificate of Analysis**

# www.tocris.com

Batch No.: 6

Catalog No.: 5702

#### Product Name: DiD perchlorate

CAS Number: 127274-91-3

IUPAC Name: 2-[5-(1,3-Dihydro-3,3-dimethyl-1-octadecyl-2*H*-indol-2-ylidene)-1,3-pentadien-1-yl]-3,3-dimethyl-1-octadecyl-3*H*-indolium perchlorate

## 1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: Batch Molecular Weight: Physical Appearance: Solubility: Storage: Batch Molecular Structure: C<sub>61</sub>H<sub>99</sub>CIN<sub>2</sub>O<sub>4</sub> 959.9 Dark blue solid Soluble in DMSO Store at -20°C

C18H37 C18H37 CIO₄'

### 2. ANALYTICAL DATA

HPLC:

λ<sub>ex</sub>:

λ<sub>em</sub>:

Shows 98.9% purity at 642 nm 646 nm 663 nm

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

# biotechne<sup>®</sup> TOCRIS

6

## www.tocris.com

#### Product Name: DiD perchlorate

CAS Number: 127274-91-3

IUPAC Name: 2-[5-(1,3-Dihydro-3,3-dimethyl-1-octadecyl-2*H*-indol-2-ylidene)-1,3-pentadien-1-yl]-3,3-dimethyl-1-octadecyl-3*H*-indolium perchlorate

#### **Description:**

Key information: DiD perchlorate is a lipophilic red fluorescent probe. Used for: labeling membranes and other hydrophobic structures. Suitable to label organelles, liposomes, viruses, lipoproteins and hematopoietic stem cells (HSCs). Suitable for live cell imaging. Application: fluorescent microscopy, flow cytometry. Properties and Photophysical Data: DiD perchlorate is a Cy5 dye used as a lipophilic fluorescent reagent. Suitable for multicolor imaging. Excitation and emission maxima ( $\lambda$ ) are 644 nm and 665 nm, respectively.

#### **Physical and Chemical Properties:**

Batch Molecular Formula: C<sub>61</sub>H<sub>99</sub>ClN<sub>2</sub>O<sub>4</sub> Batch Molecular Weight: 959.9 Physical Appearance: Dark blue solid

#### Minimum Purity: ≥95%

#### **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.

Catalog No.: 5702

#### Solubility & Usage Info:

Soluble in DMSO

#### 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:

**Khorshed** *et al* (2015) Automated identification and localization of hematopoietic stem cells in 3D intravital microscopy data. Stem Cell Reports **5** 139. PMID: 26120058.

Lo Celso et al (2009) Live-animal tracking of individual haematopoietic stem/progenitor cells in their niche. Nature 457 92. PMID: 19052546.

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

bio-techne.com	North America	China	Europe Middle East Africa	Rest of World
info@bio-techne.com techsupport@bio-techne.com	Tel: (800) 343 7475	info.cn@bio-techne.com Tel: +86 (21) 52380373	Tel: +44 (0)1235 529449	www.tocris.com/distributors Tel:+1 612 379 2956