

Certificate of Analysis

Print Date: May 19th 2022

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Product Name: Dooku 1 Catalog No.: 6568 Batch No.: 2

CAS Number: 2253744-54-4

IUPAC Name: 2-[(2,6-Dichlorobenzyl)thio)-5-(1H-pyrrol-2-yl)-1,3,4-oxadiazole

1. PHYSICAL AND CHEMICAL PROPERTIES

 $C_{13}H_9CI_2N_3OS$ **Batch Molecular Formula:**

Batch Molecular Weight: 326.2

Physical Appearance: White solid

DMSO to 100 mM Solubility:

Store at +4°C Storage:

Batch Molecular Structure:

2. ANALYTICAL DATA

HPLC: Shows 100% purity

¹H NMR: Consistent with structure **Mass Spectrum:** Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

> Theoretical 47.87 2.78 12.88 Found 47.92 2.66 12.78



Product Information

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Description:

Dooku 1 reversibly blocks Yoda1 (Cat. No. 5586) activity (IC $_{50}$ = \sim 1.5 μ M). Exhibits no effect on constitutive Piezo1 channel activity, but antagonizes Yoda1-induced Piezo1 activation in endothelial cells, and inhibits Yoda1-induced Ca $^{2+}$ -entry in vitro. Also blocks Yoda1-induced relaxation of aorta ex vivo.

Physical and Chemical Properties:

Batch Molecular Formula: C₁₃H₉Cl₂N₃OS

Batch Molecular Weight: 326.2 Physical Appearance: White solid

Minimum Purity: ≥98%

Batch Molecular Structure:

Storage: Store at +4°C

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. 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:

Evans *et al* (2018) Yoda1 analogue (Dooku1) which antagonizes Yoda1-evoked activation of Piezo1 and aortic relaxation. Br.J.Pharmacol. *175* 1744. PMID: 29498036.