

# **Certificate of Analysis**

Print Date: Sep 6th 2023

www.tocris.com

Product Name: GlyH 101 Catalog No.: 5485 Batch No.: 2

CAS Number: 328541-79-3

IUPAC Name: N-2-Naphthalenyl-2-[(3,5-dibromo-2,4-dihydroxyphenyl)methylene]glycine hydrazide

## 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:**  $C_{19}H_{15}Br_2N_3O_3$ .

Batch Molecular Weight: 493.15

Physical Appearance: Pale yellow solid

Solubility: DMSO to 100 mM

Storage: Store at -20°C

**Batch Molecular Structure:** 

## 2. ANALYTICAL DATA

**HPLC:** Shows 97.8% purity

<sup>1</sup>H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 46.28 3.07 8.52 Found 45.6 3.03 8.33



# **Product Information**

Print Date: Sep 6th 2023

www.tocris.com

Product Name: GlyH 101 Catalog No.: 5485 2

CAS Number: 328541-79-3

IUPAC Name: N-2-Naphthalenyl-2-[(3,5-dibromo-2,4-dihydroxyphenyl)methylene]glycine hydrazide

#### **Description:**

GlyH 101 is a reversible, voltage-dependent CFTR chloride channel blocker ( $K_i$  = 4.3  $\mu$ M). Inhibits forskolin-induced hyperpolarization in nasal potential differences and inhibits cholera toxin-induced intestinal fluid secretion in mice.

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

Batch Molecular Formula: C<sub>19</sub>H<sub>15</sub>Br<sub>2</sub>N<sub>3</sub>O<sub>3</sub>.

Batch Molecular Weight: 493.15

Physical Appearance: Pale yellow solid

Minimum Purity: ≥97%

#### **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 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.

#### References:

Norimatsu et al (2012) Locating a plausible binding site for an open-channel blocker, GlyH-101, in the pore of the cystic fibrosis transmembrane conductance regulator. Mol.Pharmacol. 82 1042. PMID: 22923500.

**Muanprasat** *et al* (2004) Discovery of glycine hydrazide pore-occluding CFTR inhibitors: mechanism, structure-activity analysis, and *in vivo* efficacy. J.Gen.Physiol. **124** 125. PMID: 15277574.

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