

# Certificate of Analysis

**Product Name:** PG 01

**Catalog No.:** 3943

**Batch No.:** 1

CAS Number: 853138-65-5

IUPAC Name: *N*-Methyl-*N*-[2-[[4-(1-Methylethyl)phenyl]amino]-2-1*H*-indole-3-acetamide

## 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>28</sub>H<sub>29</sub>N<sub>3</sub>O<sub>2</sub>·¼H<sub>2</sub>O

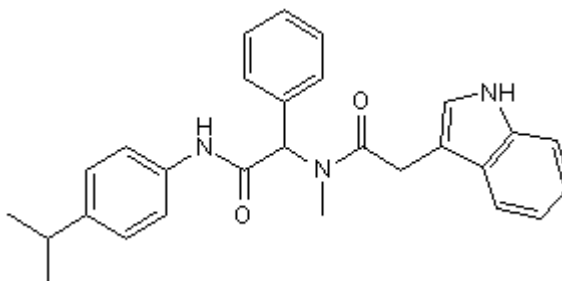
**Batch Molecular Weight:** 444.05

**Physical Appearance:** Off-white solid

**Solubility:** DMSO to 100 mM  
ethanol to 5 mM

**Storage:** Store at -20°C

**Batch Molecular Structure:**



## 2. ANALYTICAL DATA

**HPLC:** Shows 98.3% purity

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

**Mass Spectrum:** Consistent with structure

**Microanalysis:**

Carbon Hydrogen Nitrogen

Theoretical 75.74 6.7 9.46

Found 75.89 6.59 9.37

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

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**Description:**

Cystic fibrosis transmembrane conductance regulator (CFTR) potentiator. Corrects gating defects of CFTR mutants such as  $\Delta F508$  ( $K_a = 0.3 \mu M$ ), E193K and G970R ( $K_d$  values are  $0.22 \mu M$  and  $0.45 \mu M$  respectively). Increases  $\Delta F508$ -CFTR  $Cl^-$  currents in the presence of forskolin; displays no effect on  $Ca^{2+}$ -activated  $Cl^-$  current.

**Physical and Chemical Properties:**

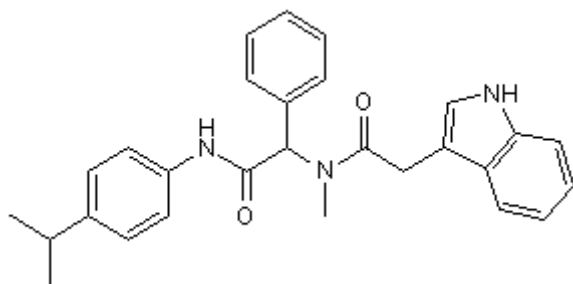
Batch Molecular Formula:  $C_{28}H_{29}N_3O_2 \cdot \frac{1}{4}H_2O$

Batch Molecular Weight: 444.05

Physical Appearance: Off-white solid

**Minimum Purity:** >98%

**Batch Molecular Structure:**



**Storage:** Store at  $-20^{\circ}C$

**Solubility & Usage Info:**

DMSO to 100 mM  
ethanol to 5 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  $45-60^{\circ}C$  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  $-20^{\circ}C$  or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

**References:**

**Pedemonte et al** (2005) Phenylglycine and sulphonamide correctors of defective  $\Delta F508$  and G551D cystic fibrosis transmembrane conductance regulator chloride-channel gating. *Mol.Pharmacol.* **67** 1797. PMID: 15722457.

**Caputo et al** (2009) Mutation-specific potency and efficacy of cystic fibrosis transmembrane conductance regulator chloride channel potentiators. *J.Pharmacol.Exp.Ther.* **330** 783. PMID: 19491324.

**Pedemonte et al** (2010) Influence of cell background on pharmacological rescue of mutant CFTR. *Am.J.Physiol.Cell Physiol* **298** C866. PMID: 20053923.

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