bio-techne
TOCRIS

Print Date: Dec 10th 2025

# Certificate of Analysis

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**Product Name:** **DQP 1105** **Catalog No.: 4491** **Batch No.: 3**

CAS Number: 380560-89-4

IUPAC Name: 5-(4-Bromophenyl)-3-(1,2-dihydro-6-methyl-2-oxo-4-phenyl-3-quinolinyl)-4,5-dihydro-γ-oxo-1*H*-pyrazole-1-butanoic acid

## 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** $C_{29}H_{24}BrN_3O_4$

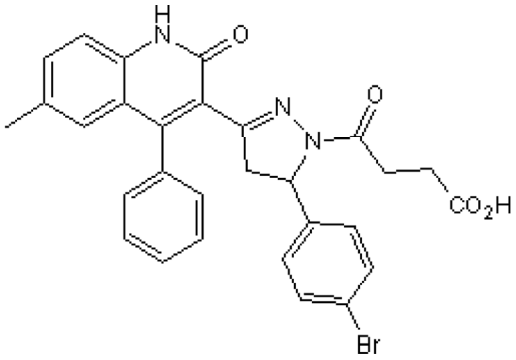
**Batch Molecular Weight:** 558.42

**Physical Appearance:** Off-white solid

**Solubility:** DMSO to 100 mM

**Storage:** Store at -20°C

**Batch Molecular Structure:**




## 2. ANALYTICAL DATA

**HPLC:** Shows 99.3% purity

**$^1$H NMR:** Consistent with structure

**Mass Spectrum:** Consistent with structure

**Microanalysis:**

| | Carbon | Hydrogen | Nitrogen |
|---|---|---|---|
| Theoretical | 62.37 | 4.33 | 7.52 |
| Found | 61.59 | 4.39 | 7.34 |

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

DQP 1105 is a noncompetitive NMDA receptor antagonist; displays over 50-fold selectivity for GluN2D- and GluN2C-containing receptors over GluN2B-, GluK2-, GluA1- and GluN2A-containing receptors ($IC_{50}$ values are 2.7, 8.5, 121, 153, 198 and 206 µM, respectively). Reduces frequency of channel opening. Please refer to IUPHAR Guide to Pharmacology for the most recent naming conventions.

**Physical and Chemical Properties:**

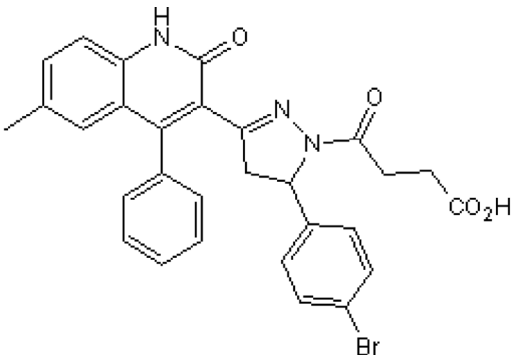
Batch Molecular Formula: $C_{29}H_{24}BrN_3O_4$

Batch Molecular Weight: 558.42

Physical Appearance: Off-white solid

**Minimum Purity:** ≥97%

**Batch Molecular Structure:**




**Storage:** Store at -20°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. *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:**

**Acker** *et al* (2011) Mechanism for noncompetitive inhibition by novel GluN2C/D N-MthD.-aspartate receptor subunit-selective modulators. Mol.Pharmacol. ***80*** 782. PMID: 21807990.