

Product Name: NQ 301

Catalog No.: 5724

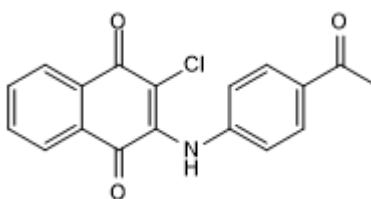
Batch No.: 1

CAS Number: 130089-98-4

IUPAC Name: 2-[(4-Acetylphenyl)amino]-3-chloro-1,4-naphthalenedione

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₈H₁₂ClNO₃
Batch Molecular Weight: 325.75
Physical Appearance: Orange solid
Solubility: DMSO to 100 mM
Storage: Store at -20°C
Batch Molecular Structure:



2. ANALYTICAL DATA

TLC: R_f = 0.6 (Dichloromethane:Methanol [95:5])
HPLC: Shows 99.6% purity
¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	66.37	3.71	4.3
Found	66.29	3.5	4.3

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

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CAS Number: 130089-98-4

IUPAC Name: 2-[(4-Acetylphenyl)amino]-3-chloro-1,4-naphthalenedione

Description:

Selective CD45 inhibitor (IC_{50} = 200 nM). Exhibits >200-fold selectivity for CD45 over six related protein tyrosine phosphatases. Increases phosphorylation of Lck in Jurkat cells and reduces T cell receptor signaling in activated splenocytes in vitro. Blocks inflammation in a delayed-type hypersensitivity model in vivo.

Physical and Chemical Properties:

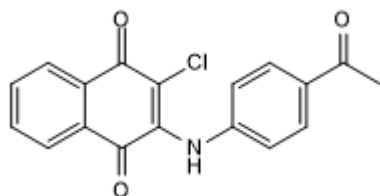
Batch Molecular Formula: $C_{18}H_{12}ClNO_3$

Batch Molecular Weight: 325.75

Physical Appearance: Orange solid

Minimum Purity: >98%

Batch Molecular Structure:



References:

Perron et al (2014) Allosteric noncompetitive small molecule selective inhibitors of CD45 tyrosine phosphatase suppress T-cell receptor signals and inflammation *in vivo*. *Mol.Pharmacol.* **85** 553. PMID: 24473749.

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. 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.

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