

Product Name: DBeQ

Catalog No.: 4417

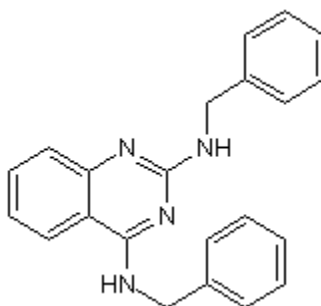
Batch No.: 1

CAS Number: 177355-84-9

IUPAC Name: *N2,N4-Bis(phenylmethyl)-2,4-quinazolinediamine*

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₂₂H₂₀N₄
Batch Molecular Weight: 340.42
Physical Appearance: White solid
Solubility: DMSO to 100 mM
 ethanol to 20 mM with gentle warming
Storage: Store at +4°C
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	77.62	5.92	16.46
Found	77.62	6.02	16.5

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

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Batch No.: 1

CAS Number: 177355-84-9

IUPAC Name: *N2,N4-Bis(phenylmethyl)-2,4-quinazolinodiamine*

Description:

Selective and reversible inhibitor of p97 ATPase ($IC_{50} = 1.5 \mu M$). Induces executioner caspases (caspase-3 and caspase-7) rapidly. Blocks the degradation of endoplasmic reticulum-associated degradation (ERAD) reporters; also blocks autophagosome maturation and promotes accumulation of LC3-II.

Physical and Chemical Properties:

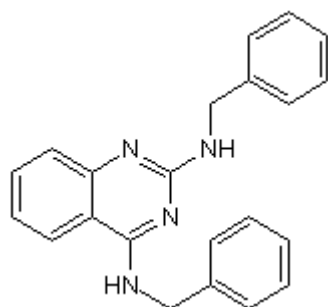
Batch Molecular Formula: $C_{22}H_{20}N_4$

Batch Molecular Weight: 340.42

Physical Appearance: White solid

Minimum Purity: >99%

Batch Molecular Structure:



Storage: Store at +4°C

Solubility & Usage Info:

DMSO to 100 mM

ethanol to 20 mM with gentle warming

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:

Chou et al (2011) Reversible inhibitor of p97, DBeQ, impairs both ubiquitin-dependent and autophagic protein clearance pathways. *Proc.Natl.Acad.Sci.USA* **108** 4834. PMID: 21383145.

Chou and Deshaies (2011) Development of p97 AAA ATPase inhibitors. *Autophagy* **7** 1091. PMID: 21606684.

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