

Certificate of Analysis

Product Name: Qc 1

Catalog No.: 5055

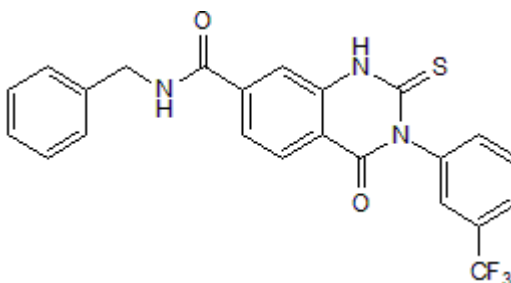
Batch No.: 1

CAS Number: 403718-45-6

IUPAC Name: 1,2,3,4-Tetrahydro-4-oxo-*N*-(phenylmethyl)-2-thioxo-3-[3-(trifluoromethyl)phenyl]-7-quinazolinecarboxamide

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula:	C ₂₃ H ₁₆ F ₃ N ₃ O ₂ S
Batch Molecular Weight:	455.45
Physical Appearance:	White solid
Solubility:	DMSO to 50 mM ethanol to 5 mM with gentle warming
Storage:	Store at +4°C
Batch Molecular Structure:	



2. ANALYTICAL DATA

HPLC:	Shows 99.4% purity
¹H NMR:	Consistent with structure
Mass Spectrum:	Consistent with structure
Microanalysis:	

	Carbon	Hydrogen	Nitrogen
Theoretical	60.65	3.54	9.23
Found	60.26	3.54	9.24

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

Product Name: Qc 1

Catalog No.: 5055

Batch No.: 1

CAS Number: 403718-45-6

IUPAC Name: 1,2,3,4-Tetrahydro-4-oxo-*N*-(phenylmethyl)-2-thioxo-3-[3-(trifluoromethyl)phenyl]-7-quinazolinecarboxamide

Description:

Reversible, non-competitive inhibitor of threonine dehydrogenase (TDH) (IC₅₀ ~500 nM). Induces autophagy and inhibits cell proliferation in mouse embryonic stem (ES) cells.

Physical and Chemical Properties:

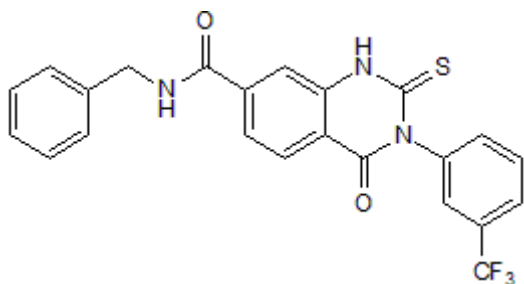
Batch Molecular Formula: C₂₃H₁₆F₃N₃O₂S

Batch Molecular Weight: 455.45

Physical Appearance: White solid

Minimum Purity: >98%

Batch Molecular Structure:



Storage: Store at +4°C

Solubility & Usage Info:

DMSO to 50 mM

ethanol to 5 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:

Alexander *et al* (2011) Targeted killing of a mammalian cell based upon its specialized metabolic state. *Proc.Natl.Acad.Sci.USA* **108** 15828. PMID: 21896756.

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

bio-techne.com

info@bio-techne.com

techsupport@bio-techne.com

North America

Tel: (800) 343 7475

China

info.cn@bio-techne.com

Tel: +86 (21) 52380373

Europe Middle East Africa

Tel: +44 (0)1235 529449

Rest of World

www.tocris.com/distributors

Tel:+1 612 379 2956