

Product Name: T3 CLK

Catalog No.: 7570

Batch No.: 1

CAS Number: 2109805-56-1

IUPAC Name: 4-[1,1-Dimethyl-2-(4-methyl-1-piperazinyl)-2-oxoethyl]-N-[6-(4-pyridinyl)imidazo[1,2-a]pyridin-2-yl]benzamide

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₂₈H₃₀N₆O₂.
Batch Molecular Weight: 482.58
Physical Appearance: White solid
Solubility: DMSO to 50 mM with gentle warming
 ethanol to 10 mM with gentle warming
Storage: Store at -20°C
Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 99.0% purity
¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	69.69	6.27	17.41
Found	69.16	6.33	17.28

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

Product Name: T3 CLK

Catalog No.: 7570

1

CAS Number: 2109805-56-1

IUPAC Name: 4-[1,1-Dimethyl-2-(4-methyl-1-piperazinyl)-2-oxoethyl]-N-[6-(4-pyridinyl)imidazo[1,2-a]pyridin-2-yl]benzamide

Description:

T3 CLK is a potent and selective pan CDC-like kinase (CLK) inhibitor (IC₅₀ values are 0.67 nM, 15 nM, and 110 nM for CLK1, CLK2, and CLK3 protein kinases, respectively). T3 CLK also inhibits DYRK1A/B (IC₅₀ values are 230 nM and 260 nM for DYRK1B and DYRK1A, respectively in cellular assays). Exhibits dose-dependent alternative splicing effects in HCT116 colorectal cancer cells. T3 CLK is cell permeable, stable and non-toxic.

Physical and Chemical Properties:

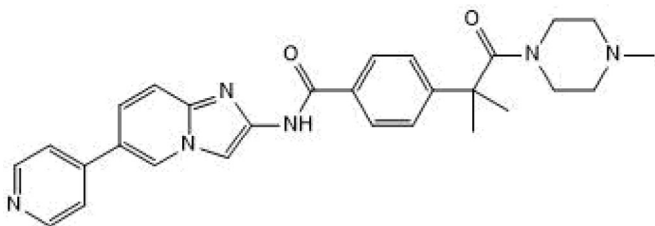
Batch Molecular Formula: C₂₈H₃₀N₆O₂.

Batch Molecular Weight: 482.58

Physical Appearance: White solid

Minimum Purity: ≥98%

Batch Molecular Structure:



Storage: Store at -20°C

Solubility & Usage Info:

DMSO to 50 mM with gentle warming
ethanol to 10 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. *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.

Licensing Information:

This probe is supplied in conjunction with the Structural Genomics Consortium. For further characterization details, please visit the T3 CLK probe summary on the SGC website.

References:

Funnell et al (2017) CLK-dependent exon recognition and conjoined gene formation revealed with a novel small molecule inhibitor. *Nat. Commun.* **8** 7. PMID: 28232751.

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