

Product Name: TEPP 46

Catalog No.: 7809

Batch No.: 1

CAS Number: 1221186-53-3

IUPAC Name: 6-[(3-Aminophenyl)methyl]-4,6-dihydro-4-methyl-2-(methylsulfinyl)-5H-thieno[2',3':4,5]pyrrolo[2,3-d]pyridazin-5-one

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₇H₁₆N₄O₂S₂·³/₄H₂O

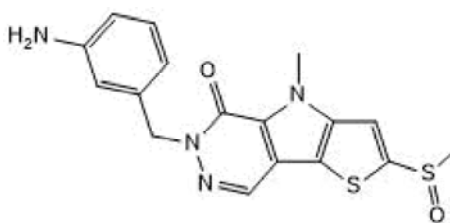
Batch Molecular Weight: 385.98

Physical Appearance: Beige solid

Solubility: DMSO to 100 mM

Storage: Store at -20°C

Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 98.7% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	52.9	4.57	14.52
Found	52.32	4.4	14.07

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

Product Name:	TEPP 46	Catalog No.:	7809	1
CAS Number:	1221186-53-3	EC Number:		
IUPAC Name:	6-[(3-Aminophenyl)methyl]-4,6-dihydro-4-methyl-2-(methylsulfinyl)-5H-thieno[2',3':4,5]pyrrolo[2,3-d]pyridazin-5-one			

Description:

TEPP 46 is a potent and selective allosteric activator of pyruvate kinase M2 (PKM2) (EC₅₀ = 92 nM); it exhibits no effect on PKM1. TEPP 46 binds at the dimer-dimer interface of the PKM2 homotetramer, blocks its translocation into the nucleus and promotes a constitutively PKM2 active state. TEPP 46 impairs H1299 lung cancer cell proliferation under hypoxic conditions but not under normoxia in vitro. It inhibits growth of H1299 tumor xenografts in mice. TEPP 46 can reverse fructose-derived F1P inhibition of PKM2 and prevent fructose promoted hypoxia adaptation of intestinal cells. TEPP 46 reduces activation, proliferation, and cytokine production. Please see product specific page on www.tocris.com for full description.

Physical and Chemical Properties:

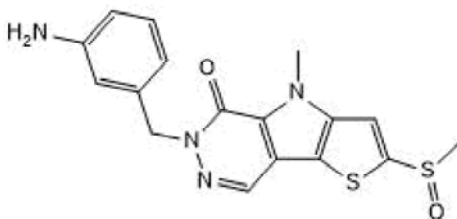
Batch Molecular Formula: C₁₇H₁₆N₄O₂S₂·¾H₂O

Batch Molecular Weight: 385.98

Physical Appearance: Beige solid

Minimum Purity: ≥98%

Batch Molecular Structure:



References:

Taylor et al (2021) Dietary fructose improves intestinal cell survival and nutrient absorption. *Nature* **597** 263. PMID: 34408323.

Angiari et al (2020) Pharmacological activation of pyruvate kinase M2 inhibits CD4+ T Cell pathogenicity and suppresses autoimmunity. *Cell Metab.* **31** 391. PMID: 31761564.

Anastasiou et al (2012) Pyruvate kinase M2 activators promote tetramer formation and suppress tumorigenesis. *Nat.Chem.Biol.* **8** 839. PMID: 22922757.

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. 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.

Licensing Information:

Sold under licence from the National Institute of Health.

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