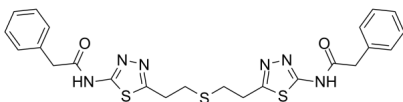


Certificate of Analysis

Catalog Number	BP22544
Product Name	BPTES

Physical and Chemical Properties

CAS No.	314045-39-1
Chemical Formula	C ₂₄ H ₂₄ N ₆ O ₂ S ₃
Molecular Weight	524.68
Solubility	DMSO: 100 mg/mL (190.59 mM, Need ultrasonic) H ₂ O: < 0.1 mg/mL (insoluble)
Storage	Powder: -20°C for 2 years In solvent: -80°C for 1 year
Chemical Structure OR Tested Image	

Product Information

Description	BPTES is an allosteric and selective glutaminase inhibitor with an IC ₅₀ of 0.16 μM.
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In vitro	<p>BPTES (10 μM) exhibits inhibition of PDAC cell proliferation. BPTES preferentially slows growth of mutant IDH1 cells without inducing apoptosis. BPTES (10 μM) reduces glutaminase activity in both WT and mutant IDH1 expressing cells, diminishes glutamate and α-KG levels, and increases glycolytic intermediates while leaving total 2-HG levels unaffected. BPTES (10 μM) shows a clear synergistic anti-cancer effect with 10 μM of 5-FU in A549 and EKVX cell lines, and results in a growth reduction response not only in EKVX and A549 but also in most of the NSCLC cell lines. BPTES (10 μM) effectively reduces the levels of the metabolites of the TCA cycle, with no changes in the levels of metabolites in glycolysis and the pentose phosphate pathway. BPTES treatment reduces about 30% ATP production under normoxia, and an additional 10% reduction of ATP production is observed under hypoxia in EKVX.</p>
In vivo	<p>BPTES-NPs (BPTES nanoparticles, 1.2 mg BPTES in 100 μL nanoparticles, i.v.) significantly attenuates tumor growth in the patient-derived pancreatic orthotopic tumor model.</p>

Analytical Data

HPLC	Shows Min >99% purity
H-NMR	Consistent with structure
Stability and Solubility Advice	<p>Information on product stability, especially in solution, has rarely been reported and in most cases we can only provide a general guideline. We recommend that once the stock solution has been prepared, it be stored in equal quantities in sealed vials and used within 1 month. Avoid repeated freezing and thawing cycles. Storage conditions for some special products should be referred to their storage details.</p>

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