

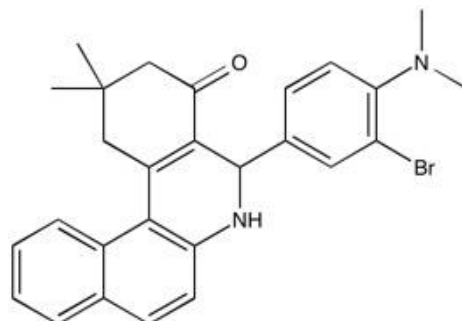
Catalog # 10-1538

GAC Inhibitor 968

CAS# 311795-38-7

5-(3-bromo-4-(dimethylamino)phenyl)-2,2-dimethyl-2,3,5,6-tetrahydrobenzo[a]-phenanthridin-4(1H)-one

Lot # X106208



Allosteric inhibitor of glutaminase C (GAC).¹ Inhibition of GAC blocks oncogenic transformation induced by Rho GTPases in fibroblasts and B lymphoma cells with no effect on normal cells.² Inhibits liver-type glutaminase GLS2 and suppresses breast tumor growth *in vivo*.^{3,4} Reverses acquired erlotinib resistance in non-small cell lung cancer.⁵

- 1) Stainecker *et al.* (2015), *Mechanism by which a recently discovered allosteric inhibitor blocks glutamine metabolism in transformed cells*; Proc. Natl. Acad. Sci. USA, **112** 394
- 2) Wang *et al.* (2010), *Targeting mitochondrial glutaminase activity inhibits oncogenic transformation*; Cancer Cell, **18** 207
- 3) Katt *et al.* (2012), *Dibenzophenanthridines as inhibitors of glutaminase C and cancer cell proliferation*; Mol. Cancer Ther., **11** 1269
- 4) Lukey *et al.* (2019), *Liver-Type Glutaminase GLS2 Is a Druggable Metabolic Node in Luminal-Subtype Breast Cancer*; Cell Reports, **29** 76
- 5) Xie *et al.* (2016), *Inhibition of mitochondrial glutaminase activity reverses acquired erlotinib resistance in non-small cell lung cancer*; Oncotarget, **7** 610

PHYSICAL DATA

Molecular Weight:	475.42
Molecular Formula:	C ₂₇ H ₂₇ BrN ₂ O
Purity:	98% by TLC
	NMR: (Conforms)
Solubility:	DMSO (up to 11 mg/ml) or Ethanol (1 mg/ml with warming)
Physical Description:	Off-white solid
Storage and Stability:	Store as supplied desiccated at room temperature for up to 2 years from the date of purchase. Solutions in DMSO or ethanol may be stored at -20°C for up to 3 months.

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