

Product Name : KH7
Synonyms : KH-7; KH 7; sAC inhibitor KH7

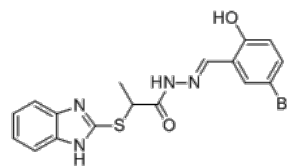
Cat No. : M14099

CAS Number : 330676-02-3

Molecular Formula : C₁₇H₁₅BrN₄O₂S

Formula Weight : 419.30

Chemical Name : (E)-2-((1H-benzo[d]imidazol-2-yl)thio)-N'-(5-bromo-2-hydroxybenzylidene)propanehydrazide



Description : A potent, specific soluble adenylyl cyclase (sAC) inhibitor that inhibits Mn²⁺-dependent sAC with IC₅₀ of 2.7 μM; inhibits physiologically stimulated sAC with similar potency with IC₅₀ of 8.0 μM, completely blocks the capacitation-induced rise in cAMP in wild-type sperm at 10 μM, inhibits in vitro fertilization.

Pathway : Metabolic Enzyme/Protease

Target : Adenylate Cyclase

Receptor : Adenylate Cyclase

Solubility : DMSO : ≥ 100 mg/mL 238.49 mM; H₂O : < 0.1 mg/mL

SMILES : CC(SC1=NC2=CC=CC=C2N1)C(N/N=C/C3=CC(Br)=CC=C3O)=O

Storage : (-20°C)

Stability : ≥ 2 years

Reference :

1. Bitterman JL, et al. J Pharmacol Exp Ther. 2013 Dec;347(3):589-98. 2. Hess KC, et al. Dev Cell. 2005 Aug;9(2):249-59.