

**Product Name:** KH 7

**Catalog No.:** 3834

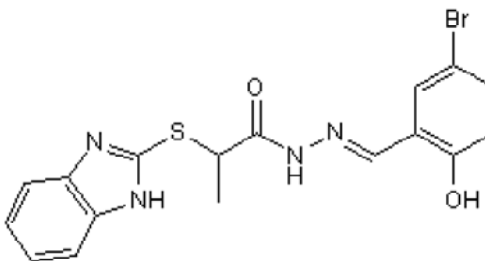
**Batch No.:** 1

CAS Number: 330676-02-3

IUPAC Name: (±)-2-(1*H*-benzimidazol-2-ylthio)propanoic acid 2-[(5-bromo-2-hydroxyphenyl)methylene]hydrazide

**1. PHYSICAL AND CHEMICAL PROPERTIES**

**Batch Molecular Formula:** C<sub>17</sub>H<sub>15</sub>BrN<sub>4</sub>O<sub>2</sub>S  
**Batch Molecular Weight:** 419.3  
**Physical Appearance:** White solid  
**Solubility:** DMSO to 100 mM  
 ethanol to 25 mM  
**Storage:** Store at +4°C  
**Batch Molecular Structure:**



**2. ANALYTICAL DATA**

**HPLC:** Shows 99.5% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure

**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	48.7	3.61	13.36
Found	48.71	3.63	13.22

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**Description:**

Selective soluble adenylyl cyclase (sAC) inhibitor (IC<sub>50</sub> = 3 - 10 μM in vivo). Inert towards transmembrane adenylyl cyclase (tmAC) in vitro and in whole cells at concentrations up to 300 μM. Blocks synthesis of cAMP and displays an antiapoptotic effect at concentrations of 1 - 100 μM.

**Physical and Chemical Properties:**

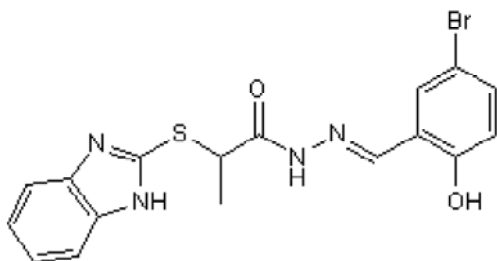
Batch Molecular Formula: C<sub>17</sub>H<sub>15</sub>BrN<sub>4</sub>O<sub>2</sub>S

Batch Molecular Weight: 419.3

Physical Appearance: White solid

**Minimum Purity:** >99%

**Batch Molecular Structure:**



**Storage:** Store at +4°C

**Solubility & Usage Info:**

DMSO to 100 mM

ethanol to 25 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.

**References:**

**Kumar *et al*** (2009) Soluble adenylyl cyclase controls mitochondria-dependent apoptosis in coronary endothelial cells. *J.Biol.Chem.* **284** 14760. PMID: 19336406.

**Stessin *et al*** (2006) Soluble adenylyl cyclase mediates nerve growth factor-induced activation of Rap1. *J.Biol.Chem.* **281** 17253. PMID: 16627466.

**Hess *et al*** (2005) The 'soluble' adenylyl cyclase in sperm mediates multiple signaling events required for fertilization. *Develop.Cell* **9** 249.

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