

Certificate of Analysis

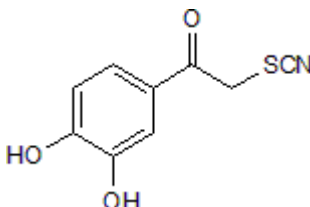
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Product Name: BIX
CAS Number: 101714-41-4
IUPAC Name: 2-(3,4-Dihydroxyphenyl)-2-oxoethyl ester thiocyanic acid

Catalog No.: 5375 **Batch No.:** 1

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₉H₇NO₃S
Batch Molecular Weight: 209.22
Physical Appearance: Beige solid
Solubility: DMSO to 100 mM
ethanol to 100 mM
Storage: Store at -20°C
Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 98.1% purity
¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	51.67	3.37	6.69
Found	51.43	3.32	6.61

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

Product Information

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Catalog No.: 5375

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IUPAC Name: 2-(3,4-Dihydroxyphenyl)-2-oxoethyl ester thiocyanic acid

Description:

BiP (Hsp70-5) ER chaperone inducer; induces BiP expression in vitro and in vivo. Protects against ER-stress induced cell death in neuronal and retinal cell lines. Also protects against ischaemia-induced hippocampal cell death in vivo.

Physical and Chemical Properties:

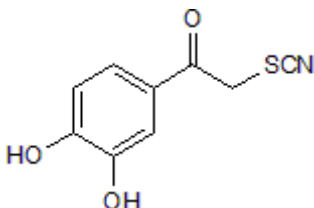
Batch Molecular Formula: C₉H₇NO₃S

Batch Molecular Weight: 209.22

Physical Appearance: Beige solid

Minimum Purity: >98%

Batch Molecular Structure:



Storage: Store at -20°C. This product is packaged under an inert atmosphere.

CAUTION - This product is light sensitive and we recommend that the solid material and any solutions obtained are protected from exposure to light.

Solubility & Usage Info:

DMSO to 100 mM

ethanol 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.

References:

Oida *et al* (2008) Induction of BiP, an ER-resident protein, prevents the neuronal death induced by transient forebrain ischemia in gerbil. *Brain Res.* **1208** 217. PMID: 18395193.

Kudo *et al* (2008) A molecular chaperone inducer protects neurons from ER stress. *Cell Death Differ.* **15** 364. PMID: 18049481.

Inokuchi *et al* (2009) Effect of an inducer of BiP, a molecular chaperone, on endoplasmic reticulum (ER) stress-induced retinal cell death. *Invest.Ophthalmol.Vis.Sci.* **50** 334. PMID: 18757512.

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