

## Certificate of Analysis

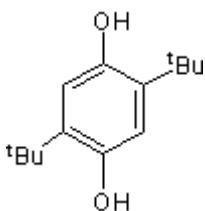
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**Product Name:** BHQ  
**CAS Number:** 88-58-4  
**IUPAC Name:** 1,4-Dihydroxy-2,5-di-*tert*-butylbenzene

**Catalog No.:** 1236  
**Batch No.:** 1  
**EC Number:** 201-841-8

### 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>14</sub>H<sub>22</sub>O<sub>2</sub>  
**Batch Molecular Weight:** 222.33  
**Physical Appearance:** Off-white solid  
**Solubility:** DMSO to 100 mM  
**Storage:** Store at RT  
**Batch Molecular Structure:**



### 2. ANALYTICAL DATA

**TLC:** R<sub>f</sub> = 0.8 (Dichloromethane:Methanol:Ammonia soln. [10:1:0.1])  
**Melting Point:** Between 223 - 229°C  
**<sup>1</sup>H NMR:** Consistent with structure  
**Microanalysis:**

	Carbon Hydrogen Nitrogen			
Theoretical	75.63	9.97	0	0 0 0
Found	75.51	10.07	0	0 0 0

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

## Product Information

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### Description:

A selective inhibitor of endoplasmic reticulum Ca<sup>2+</sup>-ATPase.

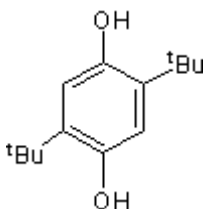
### Physical and Chemical Properties:

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Batch Molecular Weight: 222.33

Physical Appearance: Off-white solid

### Batch Molecular Structure:



**Storage:** Store at RT

### Solubility & Usage Info:

DMSO 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:

**Hassessian et al** (1994) Blockade of the inward rectifier potassium current by the Ca<sup>2+</sup>-ATPase inhibitor 2',5'-di(*tert*-butyl)-1,4-benzohydroquinone (BHQ). *Br.J.Pharmacol.* **112** 1118. PMID: 7952872.

**Jan et al** (1999) Mechanism of rise and decay of 2,5-di-*tert*-butylhydroquinone-induced Ca<sup>2+</sup> signals in Madin Darby canine kidney cells. *Eur.J.Pharmacol.* **365** 111. PMID: 9988129.

**Dettbarn and Palade** (1999) Effects of three sarcoplasmic/endoplasmic Ca<sup>++</sup> pump inhibitors on release channels and intracellular stores. *J.Pharmacol.Exp.Ther.* **285** 739. PMID: 9580621.

**Fusi et al** (1999) 2,5-Di-*t*-butyl-1,4 benzohydroquinone induces endothelium-dependent relaxation of rat thoracic aorta. *Eur.J.Pharmacol.* **366** 181. PMID: 10082199.

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