

## Certificate of Analysis

**Product Name:** GSK 4716

**Catalog No.:** 3075

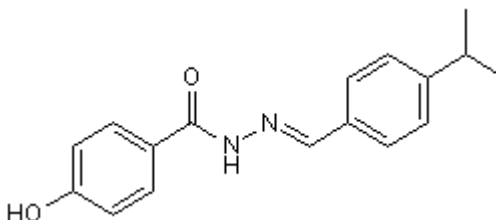
**Batch No.:** 1

CAS Number: 101574-65-6

IUPAC Name: 4-Hydroxy-2-[(1*E*)-[4-(1-methylethyl)phenyl]methylene]hydrazide

### 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>17</sub>H<sub>18</sub>N<sub>2</sub>O<sub>2</sub>·H<sub>2</sub>O  
**Batch Molecular Weight:** 300.36  
**Physical Appearance:** White solid  
**Solubility:** DMSO to 100 mM  
ethanol to 100 mM  
**Storage:** Store at +4°C  
**Batch Molecular Structure:**



### 2. ANALYTICAL DATA

**Melting Point:** At 195°C  
**HPLC:** Shows >99.9% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure  
**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	67.98	6.71	9.33
Found	67.83	6.7	9.36

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

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**Description:**

Selective agonist at estrogen-related receptors ERR $\beta$  and ERR $\gamma$ . Displays selectivity over ERR $\alpha$  and the classical estrogen receptors.

**Physical and Chemical Properties:**

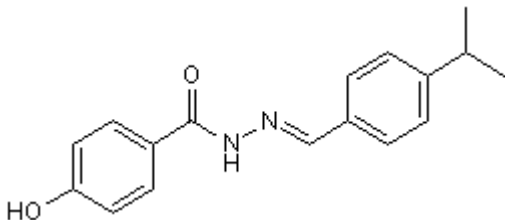
Batch Molecular Formula: C<sub>17</sub>H<sub>18</sub>N<sub>2</sub>O<sub>2</sub>.H<sub>2</sub>O

Batch Molecular Weight: 300.36

Physical Appearance: White solid

**Minimum Purity:** >99%

**Batch Molecular Structure:**



**Storage:** Store at +4°C

**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:**

**Zuercher et al** (2005) Identification and structure-activity relationship of phenolic acyl hydrazones as selective agonists for the estrogen-related orphan nuclear receptors ERR $\beta$  and ERR $\gamma$ . *J.Med.Chem.* **48** 3107. PMID: 15857113.

**Ariazi and Jordan** (2006) Estrogen-related receptors as emerging targets in cancer and metabolic disorders. *Curr.Top.Med.Chem.* **6** 203. PMID: 16515477.

**Wang et al** (2006) X-ray crystal structures of the estrogen-related receptor-gamma ligand binding domain in three functional states reveal the molecular basis of small molecule regulation. *J.Biol.Chem.* **281** 37773. PMID: 16990259.

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