

## Certificate of Analysis

**Product Name:** O411

**Catalog No.:** 5639

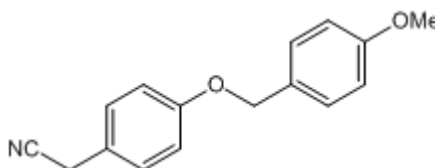
**Batch No.:** 1

CAS Number: 175135-47-4

IUPAC Name: 4-[(4-Methoxyphenyl)methoxy]benzeneacetonitrile

### 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>16</sub>H<sub>15</sub>NO<sub>2</sub>  
**Batch Molecular Weight:** 253.3  
**Physical Appearance:** Pale green solid  
**Solubility:** DMSO to 100 mM  
ethanol to 5 mM with sonication  
**Storage:** Store at RT  
**Batch Molecular Structure:**



### 2. ANALYTICAL DATA

**TLC:** R<sub>f</sub> = 0.83 (Dichloromethane:Methanol [95:5])  
**HPLC:** Shows >99.6% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure  
**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	75.87	5.97	5.53
Found	76.16	5.99	5.52

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

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**Description:**

Oct3/4 inducer. Increases Oct3/4 mRNA levels in HEK293 cells by 2.5- and 4-fold at 10  $\mu$ M and 20  $\mu$ M, respectively. Also increases expression of Oct3/4 in human adult and neonatal fibroblasts.

**Physical and Chemical Properties:**

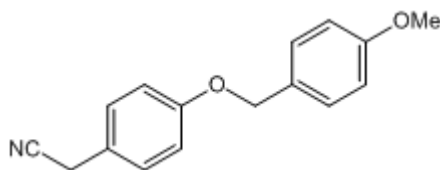
Batch Molecular Formula: C<sub>16</sub>H<sub>15</sub>NO<sub>2</sub>

Batch Molecular Weight: 253.3

Physical Appearance: Pale green solid

**Minimum Purity:** >99%

**Batch Molecular Structure:**



**Storage:** Store at RT

**Solubility & Usage Info:**

DMSO to 100 mM

ethanol to 5 mM with sonication

**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:**

**Cheng et al** (2015) Identification of 2-[4-[(4-Methoxyphenyl)methoxy]-phenyl]acetonitrile and derivatives as potent Oct3/4 inducers. *J.Med.Chem.* **58** 4976. PMID: 25898186.

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