

# PRODUCT INFORMATION



**O4I1**

Item No. 19935

**CAS Registry No.:** 175135-47-4

**Formal Name:** 4-[(4-methoxyphenyl)methoxy]-benzeneacetonitrile

**MF:** C<sub>16</sub>H<sub>15</sub>NO<sub>2</sub>

**FW:** 253.3

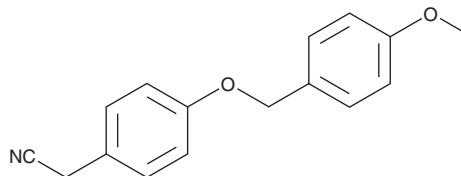
**Purity:** ≥98%

**UV/Vis.:** λ<sub>max</sub>: 228, 273 nm

**Supplied as:** A crystalline solid

**Storage:** -20°C

**Stability:** As supplied, 5 years from the QC date provided on the Certificate of Analysis, when stored properly



## Laboratory Procedures

O4I1 is supplied as a crystalline solid. A stock solution may be made by dissolving the O4I1 in the solvent of choice. O4I1 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. O4I1 is sparingly soluble in ethanol. The solubility of O4I1 in DMSO and DMF is approximately 30 mg/ml.

O4I1 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, O4I1 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. O4I1 has a solubility of approximately 0.16 mg/ml in a 1:5 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

## Description

O4I1 is an inducer of Oct3/4 expression and translation in diverse human cell lines (increases Oct3/4 mRNA in HEK293 cells by 2.5- and 4-fold at 10 and 20 μM, respectively).<sup>1</sup> It also induces Oct3/4 expression and translation in terminally differentiated human fibroblasts.<sup>1</sup> Through this action, O4I1 promotes the expression of pluripotency-associated genes in human neonatal foreskin fibroblasts.

## Reference

1. Cheng, X., Dimou, E., Alborzina, H., *et al.* Identification of 2-[4-[(4-Methoxyphenyl)methoxy]-phenyl] acetonitrile and derivatives as potent Oct3/4 inducers. *J. Med. Chem.* **58(12)**, 4976-4983 (2015).

### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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