SZABO SCANDIC

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# Produktinformation

- Forschungsprodukte & Biochemikalien
- Zellkultur & Verbrauchsmaterial
- Diagnostik & molekulare Diagnostik
- Laborgeräte & Service

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See the following pages for more information!

## Lieferung & Zahlungsart

siehe unsere Liefer- und Versandbedingungen

## Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand


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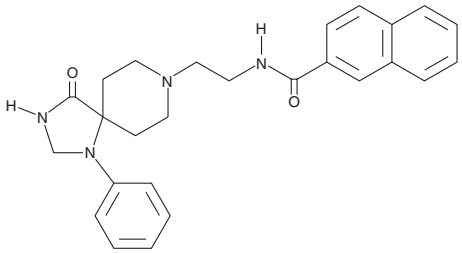
# PRODUCT INFORMATION

## CAY10594

*Item No. 13207*

| | |
|---|---|
| **CAS Registry No.:** | 1130067-34-3 |
| **Formal Name:** | N-[2-(4-oxo-1-phenyl-1,3,8-triazaspiro[4,5]dec-8-yl)ethyl]-2-naphthalenecarboxamide |
| **MF:** | $C_{26}H_{28}N_4O_2$ |
| **FW:** | 428.5 |
| **Purity:** | ≥98% |
| **UV/Vis.:** | $\lambda_{max}$: 232 nm |
| **Supplied as:** | A crystalline solid |
| **Storage:** | -20°C |
| **Stability:** | ≥2 years |



*Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.*

### Laboratory Procedures

CAY10594 is supplied as a crystalline solid. A stock solution may be made by dissolving the CAY10594 in the solvent of choice, which should be purged with an inert gas. CAY10594 is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of CAY10594 in these solvents is approximately 20 mg/ml.

CAY10594 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, CAY10594 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. CAY10594 has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

Phospholipase D (PLD) is an enzyme which cleaves the head group from phospholipids, producing the second messenger phosphatidic acid. Two mammalian isoforms of PLD, $PLD_1$ and $PLD_2$, have been identified, with multiple splice variants of each. Although the two isoforms share structural and functional features, they are regulated differently and apparently subserve distinct roles. CAY10594 is a potent $PLD_2$ inhibitor, both *in vitro* ($IC_{50}$ = 140 nM) and in cells (IC50 = 110 nM).[1] It is also effective as a $PLD_1$ inhibitor at higher concentrations ($IC_{50}$ = 5.1 µM *in vitro*, 1.0 µM in cells).[1] CAY10594 strongly inhibits the invasive migration of breast cancer cells in transwell assays, suggesting that PLD might be a useful target in blocking tumor cell invasion.[1]

### Reference


1. Scott, S.A., Selvy, P.E., Buck, J.R., *et al*. Design of isoform-selective phospholipase D inhibitors that modulate cancer cell invasiveness. *Nat. Chem. Biol.* **5(2)**, 108-117 (2009).





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