

**Product Name:** SEA 0400

**Catalog No.:** 6164

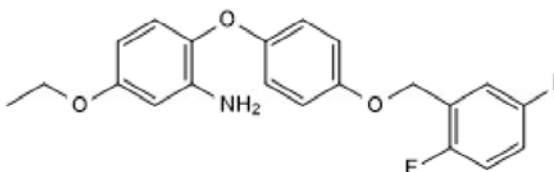
**Batch No.:** 1

CAS Number: 223104-29-8

IUPAC Name: 2-[4-[(2,5-Difluorophenyl)methoxy]phenoxy]-5-ethoxybenzenamine

## 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>21</sub>H<sub>19</sub>F<sub>2</sub>NO<sub>3</sub>  
**Batch Molecular Weight:** 371.38  
**Physical Appearance:** White solid  
**Solubility:** DMSO to 100 mM  
 ethanol to 100 mM  
**Storage:** Store at -20°C  
**Batch Molecular Structure:**



## 2. ANALYTICAL DATA

**HPLC:** Shows 99.2% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure  
**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	67.92	5.16	3.77
Found	67.56	5.14	3.47

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

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**1**

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**Description:**

SEA 0400 is a potent Na<sup>+</sup>/Ca<sup>2+</sup> exchanger (NCX) inhibitor. Inhibits NCX activity in rat astrocytes, microglia and cultured neurons, canine cardiac sarcolemmal vesicles and rat cardiomyocytes (IC<sub>50</sub> values are 5 and 8.3, 33, 90 and 92 nM, respectively). Reduces infarct volumes and exhibits protective effects against myocardial ischemia in rats.

**Physical and Chemical Properties:**

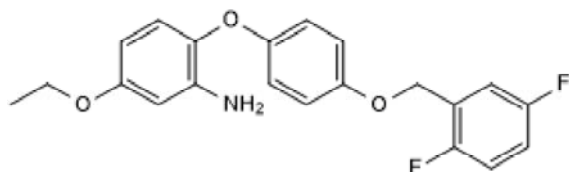
Batch Molecular Formula: C<sub>21</sub>H<sub>19</sub>F<sub>2</sub>NO<sub>3</sub>

Batch Molecular Weight: 371.38

Physical Appearance: White solid

**Minimum Purity:** ≥98%

**Batch Molecular Structure:**



**Storage:** Store at -20°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:**

**Christ *et al*** (2016) Block of Na<sup>(+)</sup>/Ca<sup>(2+)</sup> exchanger by SEA0400 in human right atrial preparations from patients in sinus rhythm and in atrial fibrillation. *Eur.J.Pharmacol.* **788** 286. PMID: 27373849.

**Karashima *et al*** (2007) Involvement of Na<sup>+</sup>-Ca<sup>2+</sup> exchanger in cAMP-mediated relaxation in mice aorta: evaluation using transgenic mice. *Br.J.Pharmacol.* **150** 343. PMID: 17220909.

**Takahashi *et al*** (2003) Protective effects of SEA0400, a novel and selective inhibitor of the Na<sup>+</sup>/Ca<sup>2+</sup> exchanger, on myocardial ischemia-reperfusion injuries. *Eur.J.Pharmacol.* **458** 155. PMID: 12498920.

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