

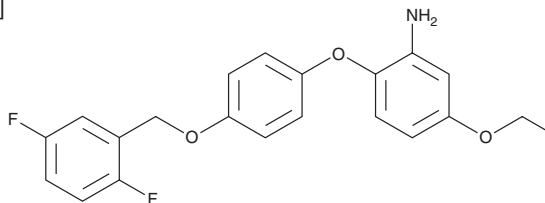
# PRODUCT INFORMATION



**SEA0400**

Item No. 19876

**CAS Registry No.:** 223104-29-8  
**Formal Name:** 2-[4-[(2,5-difluorophenyl)methoxy]phenoxy]-5-ethoxy-benzenamine  
**MF:** C<sub>21</sub>H<sub>19</sub>F<sub>2</sub>NO<sub>3</sub>  
**FW:** 371.4  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 288 nm  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** ≥4 years



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

## Laboratory Procedures

SEA0400 is supplied as a crystalline solid. A stock solution may be made by dissolving the SEA0400 in the solvent of choice, which should be purged with an inert gas. SEA0400 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of SEA0400 in these solvents is approximately 0.25, 2, and 1 mg/ml, respectively.

## Description

SEA0400 is a selective inhibitor of the Na<sup>+</sup>/Ca<sup>2+</sup> exchanger (IC<sub>50</sub>s = 5, 8.3, and 33 nM for inhibiting Na<sup>+</sup>-dependent Ca<sup>2+</sup> uptake in rat astrocyte, microglia, and cortical neuron cell lines, respectively).<sup>1</sup> It is reported to prevent dopaminergic neurotoxicity in an MPTP mouse model of Parkinson's disease and to attenuate reperfusion injury in both *in vitro* and *in vivo* cerebral ischemic models.<sup>2,3</sup>

## References

1. Matsuda, T., Arakawa, N., Takuma, K., *et al.* SEA0400, a novel and selective inhibitor of the Na<sup>+</sup>-Ca<sup>2+</sup> exchanger, attenuates reperfusion injury in the *in vitro* and *in vivo* cerebral ischemic models. *J. Pharmacol. Exp. Ther.* **298**(1), 249-256 (2001).
2. Nashida, T., Takuma, K., Fukuda, S., *et al.* The specific Na<sup>+</sup>/Ca<sup>2+</sup> exchange inhibitor SEA0400 prevents nitric oxide-induced cytotoxicity in SH-SY5Y cells. *Neurochem. Int.* **59**(1), 51-58 (2011).
3. Ago, Y., Kawasaki, T., Nashida, T., *et al.* SEA0400, a specific Na<sup>+</sup>/Ca<sup>2+</sup> exchange inhibitor, prevents dopaminergic neurotoxicity in an MPTP mouse model of Parkinson's disease. *Neuropharmacology* **61**(8), 1441-1451 (2011).

### 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.

### WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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