# **PRODUCT** INFORMATION



Co 102862

Item No. 42437

CAS Registry No.:	181144-66-1	
Formal Name:	2-[[4-(4-fluorophenoxy)phenyl]	
	methylene]-hydrazinecarboxamide	н
Synonym:	V 102862	
MF:	C <sub>14</sub> H <sub>12</sub> FN <sub>3</sub> O <sub>2</sub>	
FW:	273.3	
Purity:	≥95%	
Supplied as:	A solid	$\sim$ 0 $\sim$
Storage:	-20°C	
Stability:	≥4 years	
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Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

# Laboratory Procedures

Co 102862 is supplied as a solid. A stock solution may be made by dissolving the Co 102862 in the solvent of choice, which should be purged with an inert gas. Co 102862 is soluble (≥10 mg/ml) in DMSO and slightly soluble (0.1-1 mg/ml) in ethanol.

# Description

Co 102862 is a state-dependent inhibitor of voltage-gated sodium channels (Na,).<sup>1</sup> It selectively binds to inactivated Na<sub>v</sub> channels over resting Na<sub>v</sub> channels (K s = 0.6 and >15  $\mu$ M, respectively). Co 102862 (1  $\mu$ M) inhibits sodium currents (I<sub>Na</sub>) in primary rat acutely dissociated hippocampal neurons. In vivo, Co 102862 inhibits early- and late-phase nociceptive responses in the formalin test in mice ( $ED_{50}$ s = 10.6 and 5.2 mg/kg, respectively).<sup>2</sup> It also reduces the number of tonic seizures induced by maximum electroshock (MES) in mice and rats.

# References

- 1. Ilyin, V.I., Hodges, D.D., Whittemore, E.R., et al. V102862 (Co 102862): A potent, broad-spectrum statedependent blocker of mammalian voltage-gated sodium channels. Br. J. Pharmacol. 144(6), 801-812 (2005).
- 2. Ramu, K., Lam, G.N., and Hughes, H. In vivo metabolism and mass balance of 4-[4-fluorophenoxy] benzaldehyde semicarbazone in rats. Drug Metab. Dispos. 28(10), 1153-1161 (2000).

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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