PRODUCT INFORMATION



GR89696 (fumarate)

Item No. 40145

CAS Registry No.: Formal Name:	126766-32-3 4-[2-(3,4-dichlorophenyl)acetyl]- 3-(1-pyrrolidinylmethyl)-1- piperazinecarboxylic acid, methyl ester, (2E)-2-butenedioate	
MF: FW: Purity: Supplied as: Storage: Stability:	$C_{19}H_{25}Cl_2N_3O_3 \bullet C_4H_4O_4$ 530.4 ≥98% A solid -20°C ≥4 years	

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

Laboratory Procedures

GR89696 (fumarate) is supplied as a solid. A stock solution may be made by dissolving the GR89696 (fumarate) in the solvent of choice, which should be purged with an inert gas. GR89696 (fumarate) is soluble in methanol and DMSO.

Description

GR89696 is a κ -opioid receptor agonist.¹ It inhibits twitch responses in isolated mouse vas deferens (IC₅₀ = 0.12 nM), an effect that can be reversed by the κ -opioid receptor antagonist norbinaltorphimine (nor-BNI). In vivo, GR89696 reduces acetylcholine-induced writhing in mice ($ED_{50} = 0.0005 \text{ mg/kg}$). It reduces hippocampal neuronal loss in a gerbil model of cerebral ischemia induced by bilateral carotid artery occlusion when administered at doses of 10 and 30 mg/kg.²

References

- 1. Hayes, A.G., Birch, P.J., Hayward, N.J., et al. A series of novel, highly potent and selective agonists for the к-opioid receptor. Br. J. Pharmacol. 101(4), 944-948 (1990).
- 2. Birch, P.J., Rogers, H., Hayes, A.G., et al. Neuroprotective actions of GR89696, a highly potent and selective κ-opioid receptor agonist. Br. J. Pharmacol. 103(3), 1819-1823 (1991).

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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