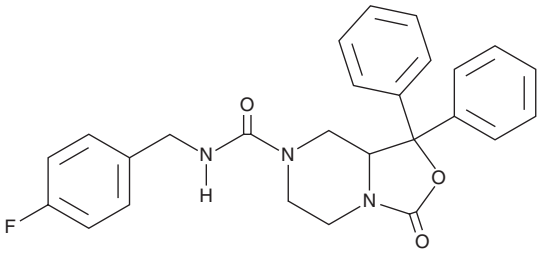
PRODUCT INFORMATION

SHA-68

Item No. 21512

CAS Registry No.:	847553-89-3
Formal Name:	N-[(4-fluorophenyl)methyl]tetrahydro-3-oxo-1,1-diphenyl-3H-oxazolo[3,4-a]pyrazine-7(1H)-carboxamide
MF:	$C_{26}H_{24}FN_3O_3$
FW:	445.5
Purity:	≥95%
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

SHA-68 is supplied as a crystalline solid. A stock solution may be made by dissolving the SHA-68 in the solvent of choice, which should be purged with an inert gas. SHA-68 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of SHA-68 in these solvents is approximately 20, 14, and 16 mg/ml, respectively.

SHA-68 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, SHA-68 should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. SHA-68 has a solubility of approximately 0.33 mg/ml in a 1:2 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

SHA-68 is an antagonist of the neuropeptide S receptor (NPSR; IC_{50}s = 22 and 23.8 nM for the NPSR Asn^{107} and NPSR Ile^{107} isoforms, respectively).[1] It is selective for NPSR over a panel of 14 G protein-coupled receptors exhibiting no activity at a concentration of 10 µM. SHA-68 (50 mg/kg) reduces NPS-induced horizontal activity and vertical rearing and climbing in mice. SHA-68 also reduces conditioned reinstatement of cocaine seeking in rats.[2]

References

1. Okamura, N., Habay, S.A., Zeng, J., *et al.* Synthesis and pharmacological in vitro and in vivo profile of SHA 68 (3-Oxo-1,1-diphenyl-tetrahydro-oxazolo[3,4-a]pyrazine-7-carboxylic acid 4-fluoro-benzylamide), a selective antagonist of the neuropeptide S receptor. *J. Pharmacol. Exp. Ther.* **325(5)**, 893-901 (2008).
2. Kallupi, M., Cannella, N., Economidou, D., *et al.* Neuropeptide S facilitates cue-induced relapse to cocaine seeking through activation of the hypothalamic hypocretin system. *Proc. Natl. Acad. Sci. U.S.A.* **107(45)**, 19567-19572 (2010).

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