PRODUCT INFORMATION



VU0453379 (hydrochloride)

Item No. 41392

Formal Name:	2-cyclopentyl-2,9-dihydro-9- methyl-N-[[(2S)-1-(1-methylethyl)- 2-pyrrolidinyl]methyl]-1-oxo-1H- pyrido[3,4-b]indole-4-carboxamide, monohydrochloride	
MF:	$C_{26}H_{34}N_4O_2 \bullet HCI$	
FW:	471.0	
Purity:	≥98%	
Supplied as:	A solid	
Storage:	-20°C	$\langle \rangle$
Stability:	≥4 years	

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

Laboratory Procedures

VU0453379 (hydrochloride) is supplied as a solid. A stock solution may be made by dissolving the VU0453379 (hydrochloride) in the solvent of choice, which should be purged with an inert gas. VU0453379 (hydrochloride) is sparingly soluble (1-10 mg/ml) in DMSO and slightly soluble (0.1-1 mg/ml) in acetonitrile.

Description

VU0453379 is an allosteric agonist and positive allosteric modulator (ago-PAM) of glucagon-like peptide 1 receptor (GLP-1R).¹ It induces calcium mobilization in 9-3-H cells expressing human GLP-1R $(EC_{50} = 1.3 \mu M)$ and enhances GLP-1-, exenatide-, or liraglutide-induced calcium mobilization in the same cells (EC₅₀s = 1.8, 8.4, and 30 μM, respectively). VU0453379 (30 μM) potentiates exenatide-induced insulin secretion in primary mouse pancreatic islets. It reverses catalepsy induced by haloperidol (Item No. 12014) in a rat model of Parkinson's disease motor symptoms when administered at a dose of 30 mg/kg.

Reference

1. Morris, L.C., Nance, K.D., Gentry, P.R., et al. Discovery of (S)-2-cyclopentyl-N-((1-isopropylpyrrolidin2yl)-9-methyl-1-oxo-2,9-dihydro-1H-pyrrido[3,4-b]indole-4-carboxamide (VU0453379): A novel, CNS penetrant glucagon-like peptide 1 receptor (GLP-1R) positive allosteric modulator (PAM). J. Med. Chem. 57(23), 10192-10197 (2014).

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

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