

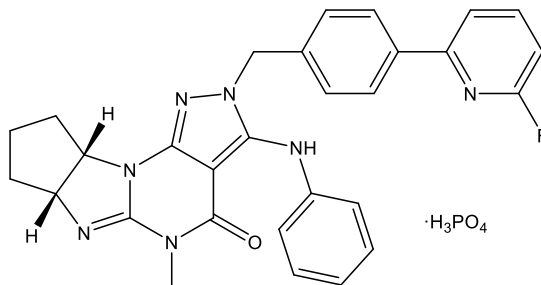
Catalog # 10-4362

ITI-214

CAS# 1642303-38-5

(11*R*,15*S*)-5-Anilino-4-[[4-(6-fluoro-2-pyridinyl)phenyl]methyl]-8-methyl-1,3,4,8,10-pentazatetracyclo[7.6.0.0^{2,6}.0^{11,15}]pentadeca-2,5,9-trien-7-one phosphate; Lenrispodun phosphate

Lot # FBS5036



ITI-214 is an ultra-potent and selective inhibitor of phosphodiesterase 1 (PDE1) – $K_i = 58 \text{ pM}$.¹ Active in various animal models of motor and cognitive functions.¹⁻³ It has also been shown to suppress inflammatory responses^{4,5} and improve vascular function⁵.

- 1) Li *et. al.* (2016), *Discovery of Potent and Selective Inhibitors of Phosphodiesterase 1 for the Treatment of Cognitive Impairment Associated with Neurodegenerative and Neuropsychiatric Diseases*; J. Med. Chem., **59** 1149
- 2) Snyder *et. al.* (2016), *Preclinical profile of ITI-214, an inhibitor of phosphodiesterase 1, for enhancement of memory performance in rats*; Psychopharmacology (Berl), **233** 3113
- 3) Pekcec *et. al.* (2018), *Targeting the dopamine D1 receptor or its downstream signalling by inhibiting phosphodiesterase-1 improves cognitive performance*; Br. J. Pharmacol., **175** 3021
- 4) O'Brien *et. al.* (2020), *Inhibition of calcium-calmodulin phosphodiesterase (PDE1) suppresses inflammatory responses*; Mol. Cell Neurosci., **102** 103449
- 5) Golshiri *et. al.* (2021), *Selective Phosphodiesterase 1 Inhibition Ameliorates Vascular Function, Reduces Inflammatory Response, and Lowers Blood Pressure in Aging Animals*; J. Pharmacol. Exp. Ther., **378** 173

PHYSICAL DATA

Molecular Weight:	605.57
Molecular Formula:	C ₂₉ H ₂₆ FN ₇ O·H ₃ PO ₄
Purity:	>98% by HPLC
	NMR: (Conforms)
Solubility:	DMSO (>25 mg/ml)
Physical Description:	Off-white solid
Storage and Stability:	Store as supplied desiccated at -20°C for up to 2 years from the date of purchase. Solutions in DMSO may be stored at -20°C for up to 3 months.

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