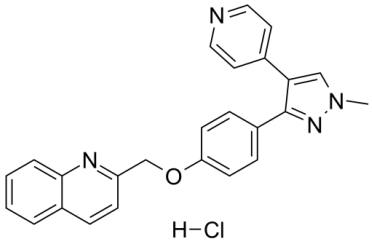
Data Sheet

Product Name:	Mardepodect (hydrochloride)
Cat. No.:	CS-5987
Molecular Formula:	C25H21ClN4O
Molecular Weight:	428.91
Target:	Phosphodiesterase (PDE)
Pathway:	Metabolic Enzyme/Protease
Solubility:	DMSO : 25 mg/mL (58.29 mM; Need ultrasonic)



BIOLOGICAL ACTIVITY:

Mardepodect hydrochloride (PF-2545920 hydrochloride) is a potent, orally active and selective **PDE10A** inhibitor with an **IC_{50}** of 0.37 nM, with >1000-fold selectivity over other **PDEs**. Mardepodect hydrochloride can cross the blood-brain barrier[1][2]. IC50 & Target: IC50: 0.37 nM (PDE10A)[1]. **In Vivo:** In the conditioned avoidance response assay (CAR), Mardepodect (PF-2545920) is active with an ED_{50} of 1 mg/kg. Administration of Mardepodect (PF-2545920) to mice causes a dose dependent increase in striatal cGMP[2].

References:

[1]. Wilson JM et al. Phosphodiesterase 10A inhibitor, MP-10 (PF-2545920), produces greater induction of c-Fos in D2 neurons than in D1 neurons in the neostriatum. Neuropharmacology. 2015 Dec;99:379-86.

[2]. Verhoest PR et al. Discovery of a novel class of phosphodiesterase 10A inhibitors and identification of clinical candidate 2-[4-(1-methyl-4-pyridin-4-yl-1H-pyrazol-3-yl)-phenoxymethyl]-quinoline (PF-2545920) for the treatment of schizophrenia. J Med Chem. 2009 Aug 27;52(16):5188-96.

CAIndexNames:

Quinoline, 2-[[4-[1-methyl-4-(4-pyridinyl)-1H-pyrazol-3-yl]phenoxy]methyl]-,hydrochloride(1:1)

SMILES:

CN1N=C(C2=CC=C(OCC3=NC4=CC=CC=C4C=C3)C=C2)C(C5=CC=NC=C5)=C1.Cl[H]

Caution: Product has not been fully validated for medical applications. For research use only.

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