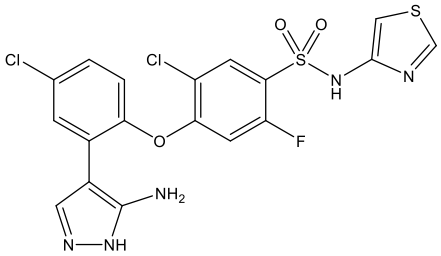
Catalog # 10-3990
PF-05089771

CAS# 1235403-62-9

4-[2-(5-Amino-1H-pyrazol-4-yl)-4-chlorophenoxy]-5-chloro-2-fluoro-N-(1,3-thiazol-4-yl)benzenesulfonamide; PF771

Lot # FBS2151



PF-05089771 (1235403-62-9) is a potent and selective inhibitor of the voltage gated sodium channel 1.7 (Nav1.7).[1,3] It is a state-dependent inhibitor with IC_{50} = 11 nM for the half-inactivated channels and IC_{50} ~ 10 µM for resting channels.[1] Equipotent for human, monkey, dog, and mouse channels but 15x less potent for rat channels. Interacts equally with fast and slow inactivated Nav1.7 channels.[2]

1) Alexandrou *et al.* (2016), *Subtype-Selective Small Molecule Inhibitors Reveal a Fundamental Role for Nav1.7 in Nociceptor Electrogenesis, Axonal Conduction and Presynaptic Release;* PLoS One, **11** e0152405
2) Theile *et al.* (2016), *The Selective Nav1.7 Inhibitor, PF-05089771, Interacts Equivalently with Fast and Slow Inactivated Nav1.7 Channels*; Mol. Pharmacol., **90** 540
3) Swain *et al*. (2017), *Discovery of Clinical Candidate 4-[2-(5-Amino-1H-pyrazol-4-yl)-4-chlorophenoxy]-5-chloro-2-fluoro-N-1,3-thiazol-4-ylbenzenesulfonamide (PF-05089771): Design and Optimization of Diaryl Ether Aryl Sulfonamides as Selective Inhibitors of Na(V)1.7*; J. Med. Chem., **60** 7029

PHYSICAL DATA

Molecular Weight:	500.34
Molecular Formula:	$C_{18}H_{12}Cl_2FN_5O_3S_2$
Purity:	>98% by HPLC
	NMR: (Conforms)
Solubility:	DMSO (>25 mg/ml)
Physical Description:	White solid
Storage and Stability:	Store as supplied at -20°C for up to 1 year from the date of purchase. Solutions in DMSO may be stored at -20°C for up to 3 months.

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