

# GNE-7915 (tosylate)

Catalog No: tcsc3095



## Available Sizes

**Size:** 10mg

**Size:** 50mg

**Size:** 100mg



## Specifications

### Formula:

$C_{26}H_{29}F_4N_5O_6S$

### Pathway:

Autophagy

### Target:

LRRK2

### Purity / Grade:

>98%

### Solubility:

DMSO :  $\geq 50$  mg/mL (81.22 mM); H<sub>2</sub>O :

### Observed Molecular Weight:

615.6

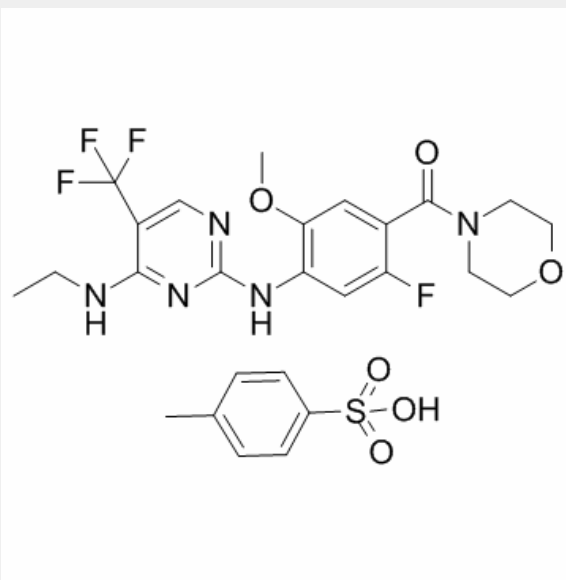
## Product Description

GNE-7915 tosylate is a potent, selective and brain-penetrant inhibitor of **LRRK2** with an **IC<sub>50</sub>** of 9 nM.

IC<sub>50</sub> & Target: IC<sub>50</sub>: 9 nM<sup>[1]</sup> (LRRK2)

**In Vitro:** Maintaining the methoxy/fluoro arrangement at C-2'/C-5' and varying aminoalkyl R1 substitution results in single-digit nanomolar LRRK2 cellular activities for GNE-7915 and compound 19. Expanded Invitrogen kinase profiling (187 kinases) at 0.1  $\mu$ M for both GNE-7915 (100-fold over LRRK2 Ki) and 19 (250-fold over LRRK2 Ki) results in only TTK showing greater than 50% inhibition.

Selectivity profiling using the DiscoverX KinomeScan55 competitive binding assay panel, which includes 392 unique kinases, is also performed for GNE-7915 at 0.1  $\mu$ M. Binding of >50% probe displacement is detected for 10 kinases and of >65% for only LRRK2, TTK, and ALK, further supporting the excellent LRRK2 selectivity for GNE-7915. Cerep receptor profiling, including expanded brain panels, suggests that GNE-7915 and 19 only inhibit 5-HT<sub>2B</sub> with >70% inhibition at 10  $\mu$ M. GNE-7915 and 19 are confirmed to be moderately potent 5-HT<sub>2B</sub> antagonists in vitro functional assays<sup>[2]</sup>.



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