

# **Data Sheet**

Product Name: PD 123319 (ditrifluoroacetate)

 Cat. No.:
 CS-1547

 CAS No.:
 136676-91-0

 Molecular Formula:
 C35H34F6N4O7

Molecular Weight: 736.66

Target: Angiotensin Receptor Pathway: GPCR/G Protein

**Solubility**: H2O : ≥ 36 mg/mL (48.87 mM)

## **BIOLOGICAL ACTIVITY:**

PD 123319 (ditrifluoroacetate) is a potent, selective **AT2 angiotensin II receptor** antagonist with **IC**<sub>50</sub> of 34 nM. IC50 & Target: IC50: 34 nM (AT2 Receptor)<sup>[1]</sup> **In Vitro**: PD 123319 is shown to discriminate between two subclasses of AII receptors in many different tissues.  $^{125}$ I-AII specifically label two classes of binding sites for AII in a membrane preparation of bovine adrenal glomerulosa cells. The first class (DuP-753 sensitive) represents approximately 85% of the total binding sites for AII and possesses a high affinity (IC<sub>50</sub> of 92.9 nM) for DuP-753. PD-123319 does not have any effect on  $^{125}$ I-AII binding to this site. The second class of binding sites is more sensitive to PD-123319, with an IC<sub>50</sub> of 6.9 nM, and has a much lower affinity for DuP-753 (IC<sub>50</sub> around 10 microM)<sup>[2]</sup>.

# References:

- [1]. Blankley CJ, et al. Synthesis and structure-activity relationships of a novel series of non-peptide angiotensin II receptor binding inhibitors specific for the AT2 subtype. J Med Chem. 1991 Nov;34(11):3248-60.
- [2]. Boulay G, et al. Modulation of angiotensin II binding affinity by allosteric interaction of polyvinyl sulfate with an intracellular domain of the DuP-753-sensitive angiotensin II receptor of bovine adrenal glomerulosa. Mol Pharmacol. 1992 Apr;41(4):809-15
- [3]. Estrup TM, et al. No effect of angiotensin II AT(2)-receptor antagonist PD 123319 on cerebral blood flow autoregulation. J Renin Angiotensin Aldosterone Syst. 2001 Sep;2(3):188-92.
- [4]. Brillante DG, et al. Effects of intravenous PD 123319 on haemodynamic and arterial stiffness indices in healthy volunteers. J Renin Angiotensin Aldosterone Syst. 2005 Sep;6(2):102-6.

### **CAIndexNames**:

1H-Imidazo[4,5-c]pyridine-6-carboxylic acid, 1-[[4-(dimethylamino)-3-methylphenyl]methyl]-5-(2,2-diphenylacetyl)-4,5,6,7-tetrahydro-, (6S)-, 2,2,2-trifluoroacetate (1:2)

#### **SMILES:**

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

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