

Fenoldopam

Catalog No: tcsc2979



Available Sizes

Size: 10mg



Specifications

CAS No:

67227-56-9

Formula:

$C_{16}H_{16}ClNO_3$

Pathway:

GPCR/G Protein;Neuronal Signaling

Target:

Dopamine Receptor;Dopamine Receptor

Purity / Grade:

>98%

Solubility:

10 mM in DMSO

Alternative Names:

SKF 82526

Observed Molecular Weight:

305.76

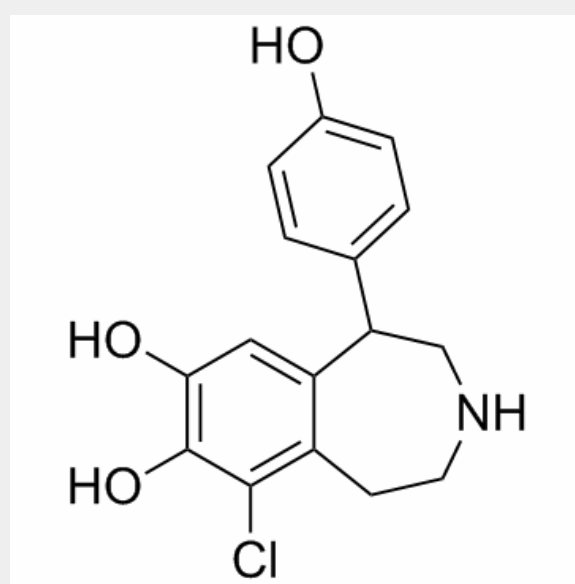
Product Description

Fenoldopam(SKf 82526) is a drug and synthetic benzazepine derivative which acts as a selective D1 receptor partial agonist.

Target: D1 Receptor

Fenoldopam is a selective dopamine-1 (DA1) agonist with natriuretic/diuretic properties. Fenoldopam stimulated cAMP accumulation

in LLC-PK1 cells in a dose-dependent manner, an effect which could be blocked by the DA1-selective antagonist Sch 23390. Although fenoldopam was more potent than DA (EC_{50} 55.5 \pm 7.75 nM vs. 1.65 \pm 0.64 μ M) in stimulating cAMP accumulation in LLC-PK1 cells, the maximum stimulation obtained by fenoldopam was only 37% of the maximum stimulation obtained by DA (E_{max} 13.0 \pm 2.95 pmol/mg of protein vs. 35.6 \pm 10.19 pmol/mg of protein) [1]. Fenoldopam is a selective dopamine1 (DA1) receptor agonist. Most of the DA1 receptor agonist activity of fenoldopam resides in the R-enantiomer, which also shows weaker α 2-adrenoceptor antagonist activity. Fenoldopam produces vasodilation in vascular beds that are rich in vascular DA1 receptors [2].



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