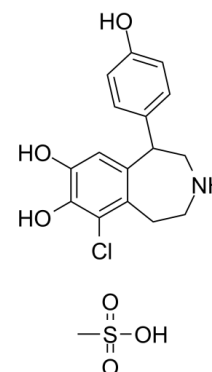


## Data Sheet

<b>Product Name:</b>	Fenoldopam (mesylate)
<b>Cat. No.:</b>	CS-4212
<b>CAS No.:</b>	67227-57-0
<b>Molecular Formula:</b>	C <sub>17</sub> H <sub>20</sub> ClNO <sub>6</sub> S
<b>Molecular Weight:</b>	401.86
<b>Target:</b>	Dopamine Receptor
<b>Pathway:</b>	GPCR/G Protein; Neuronal Signaling
<b>Solubility:</b>	DMSO : ≥ 36 mg/mL (89.58 mM); H <sub>2</sub> O : 10 mg/mL (24.88 mM); Need ultrasonic)



### BIOLOGICAL ACTIVITY:

Fenoldopam(SKF 82526) mesylate 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<sub>50</sub> 55.5 +/- 7.75 nM vs. 1.65 +/- 0.64 microM) 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<sub>max</sub> 13.0 +/- 2.95 pmol/mg of protein vs. 35.6 +/- 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 alpha 2-adrenoceptor antagonist activity Fenoldopam produces vasodilation in vascular beds that are rich in vascular DA1 receptors [2].

### References:

- [1]. Grenader, A. and D.P. Healy, Fenoldopam is a partial agonist at dopamine-1 (DA1) receptors in LLC-PK1 cells. *J Pharmacol Exp Ther*, 1991. 258(1): p. 193-8.
- [2]. Nichols, A.J., R.R. Ruffolo, Jr., and D.P. Brooks, The pharmacology of fenoldopam. *Am J Hypertens*, 1990. 3(6 Pt 2): p. 116S-119S.

### CAIndexNames:

1H-3-Benzazepine-7,8-diol, 6-chloro-2,3,4,5-tetrahydro-1-(4-hydroxyphenyl)-, methanesulfonate (1:1)

### SMILES:

OC1=C(O)C=C2C(C3=CC=C(O)C=C3)CNCCC2=C1Cl.CS(=O)(O)=O

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

Tel: 732-484-9848 Fax: 888-484-5008 E-mail: sales@ChemScene.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA