MedChemExpress

Win 58237

| Cat. No.: | $\mathrm{HY}-101661$ |
| :--- | :--- |
| CAS No.: | $158001-76-4$ |
| Molecular Formula: | $\mathrm{C}_{16} \mathrm{H}_{17} \mathrm{~N}_{5} \mathrm{O}$ |
| Molecular Weight: | 295.34 |
| Target: | Phosphodiesterase (PDE) |
| Pathway: | Metabolic Enzyme/Protease |
| Storage: | Please store the product under the recommended conditions in the Certificate of |
|  | Analysis. |



## BIOLOGICAL ACTIVITY

## Description

$\mathrm{IC}_{50}$ \& Target $\quad$ Ki: $170 \mathrm{nM}(\text { PDE V) })^{[1]}$

In Vitro

In Vivo activity.

Win 58237 is a cyclic nucleotide phosphodiesterase (PDE) inhibitor, with $K_{i}$ of 170 nM for PDE V, possessing vasorelaxant

Win 58237 is a competitive inhibitor of cGMP PDE V from canine aorta, with a $K_{i}$ value of 170 nM . Win 58237 is a potent inhibitor of PDE V isolated from vascular tissue with an $\mathrm{IC}_{50}$ value of 240 nM . It is a relatively less potent inhibitor of calmodulin-sensitive PDE I and cGMP-inhibitable cyclic AMP PDE III; but does inhibit cyclic AMP PDE IV with an IC 50 value of approximately 300 nM . Win 58237 possesses vasorelaxant activity in the presence of an intact endothelium or nitric oxide ${ }^{[1]}$. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Win 58237 (0.3-3.0 mg/kg i.v.) decreases mean arterial pressure in conscious spontaneously hypertensive rats with an associated increase in vascular (aortic) cGMP content in vivo. Win 58237 (10 mg/kg i.v.) increases plasma cGMP levels, from basal levels of $6.7 \pm 1.0$ to $31.4 \pm 3.5 \mathrm{fmol} / \mu \mathrm{L}^{[1]}$.
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

## REFERENCES

[1]. Silver PJ, et al. Cyclic GMP potentiation by WIN 58237, a novel cyclic nucleotide phosphodiesterase inhibitor. JPharmacol Exp Ther. 1994 Dec;271(3):1143-9.

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