

WWW.PROBECHEM.COM

**Data Sheet** 

Global Supplier of Chemical Probes, Inhibitors & Agonists.

Product Name	:	YM976
Cat. No.	:	PC-22040
CAS No.	:	191219-80-4
Molecular Formula	:	C <sub>17</sub> H <sub>16</sub> CIN <sub>3</sub> O
Molecular Weight	:	313.79
Target	:	Phosphodiesterase (PDE)
Solubility	:	10 mM in DMSO



## **Biological Activity**

YM976 is a potent, selective phosphodiesterase type 4 (PDE4) inhibitor with IC50 of 2.2 nM against PDE4 purified from human peripheral leukocytes.

YM976 has no effects on the other PDE isozymes, PDE1, -2, -3, and -5.

YM976 potentiates prostaglandin E(2)-induced cAMP accumulation in a human mononuclear cell line, U937, and YM976 inhibits TNF-alpha production from human peripheral blood mononuclear cells stimulated by lipopolysaccharide. YM976 inhibits the cell infiltration into the pleural cavity with oral ED(30) values of 9.1 mg/kg in rat carrageenan-induced pleurisy models.

YM976 dose dependently reduces carrageenan-induced leukocyte infiltration at the doses of 1, 3, and 10 mg/kg, p.o.

## References

Aoki M, et al. J Pharmacol Exp Ther. 2000 Oct;295(1):255-60.

Aoki M, et al. J Pharmacol Exp Ther. 2000 Dec;295(3):1149-55.