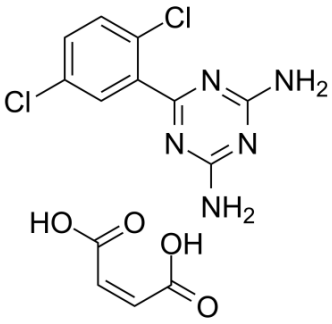
Irsogladine maleate

Cat. No.:	HY-B0327A
CAS No.:	84504-69-8
Molecular Formula:	$C_{13}H_{11}Cl_2N_5O_4$
Molecular Weight:	372.16
Target:	mAChR; Phosphodiesterase (PDE)
Pathway:	GPCR/G Protein; Neuronal Signaling; Metabolic Enzyme/Protease
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description

Irsogladine is a PDE4 inhibitor and muscarinic acetylcholine receptor binder.Target: PDE4; mACHRIrsogladine treatment (300 and 500 mg/kg/day) resulted in a dose-dependent reduction of angiogenesis in wild-type mice by 21 and 45.3% ($P < 0.02$, $P < 0.001$), in tPA-deficient mice by 42.6 and 46% ($P < 0.001$, $P < 0.001$), and in uPA-deficient mice by 27.2 and 46% ($P < 0.05$, $p < 0.001$), respectively. Irsogladine inhibits bFGF-induced angiogenesis in wild-type, tPA-knockout, and uPA-knockout mice [1]. Irsogladine up-regulates GJIC between PC cells via regulation of the PKA pathway. It also suggests a useful adjuvant of Irsogladine to pancreatic cancer therapy [2]. irsogladine produces the increase of intracellular cAMP content via non-selective inhibition of PDE isozymes, which may be a key mechanism involved in its gastroprotective actions [3].

CUSTOMER VALIDATION

- Cryst Growth Des. 2016, 16 (12):6714-6718.

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REFERENCES

[1]. Ren, C.J., et al., Irsogladine maleate inhibits angiogenesis in wild-type and plasminogen activator-deficient mice. J Surg Res, 1998. 77(2): p. 126-31.

[2]. Kawasaki, Y., et al., Irsogladine malate up-regulates gap junctional intercellular communication between pancreatic cancer cells via PKA pathway. Pancreas, 2002. 25(4): p. 373-7.

[3]. Kyoi, T., et al., Phosphodiesterase inhibition by a gastroprotective agent irsogladine: preferential blockade of cAMP hydrolysis. Life Sci, 2004. 75(15): p. 1833-42.

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

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