ZLJ-6

Cat. No.: HY-113807

CAS No.: 1051931-39-5

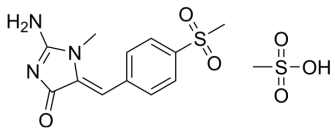
Molecular Formula: $C_{13}H_{17}N_3O_6S_2$

Molecular Weight: 375

Target: COX; Lipoxygenase

Pathway: Immunology/Inflammation; Metabolic Enzyme/Protease

Storage: Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description

ZLJ-6 is a dual COX and 5-LOX inhibitor with oral activity. The IC_{50} values for COX-1, COX-2 and 5-LOX were 0.73, 0.31 and 0.99 μM, respectively. ZLJ-6 has anti-inflammatory and analgesic activity[1][1].

IC_{50} & Target

COX-1	COX-2	5-LOX
0.73 μM (IC_{50})	0.31 μM (IC_{50})	0.99 μM (IC_{50})

In Vitro

ZLJ-6 (3, 10, 30 μM, 6 h) can effectively inhibit the expression of TNF-α-induced monocyte endothelial interaction and adhesion molecules (e-selectin, ICAM-1 and VCAM-1)[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Western Blot Analysis[1]

Cell Line:	HUVECs
Concentration:	3, 10, 30 μM
Incubation Time:	6 h
Result:	Decreased NF-κB p65 subunit translocation to nucleus dose-dependently. Inhibited TNF-α-induced IκBα phosphorylation.

In Vivo

ZLJ-6 (3, 10, 30 mg/kg, oral) shows effective anti-inflammatory activity in carrageenan-induced rat plantar edema model, and analgesic activity in acetic acid-induced mouse peritoneal construction model[2].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Li L, et al. The anti-inflammatory effects of ZLJ-6, a novel dual cyclooxygenase/5-lipoxygenase inhibitor. Eur J Pharmacol. 2009 Apr 1;607(1-3):244-50.

[2]. Chen L, et al. ZLJ-6, a novel COX/5-LOX inhibitor, attenuates TNF-α-induced endothelial E-selectin, ICAM-1 and VCAM-1 expression and monocyte-endothelial interactions via a COX/5-LOX-independent mechanism. Vascul Pharmacol. 2011 Nov-Dec;55(5-6):135-42.

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

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