I-BOP

Cat. No.: HY-116431

CAS No.: 128719-90-4

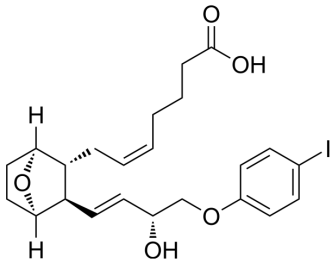
Molecular Formula: $C_{23}H_{29}IO_5$

Molecular Weight: 512.38

Target: Prostaglandin Receptor

Pathway: GPCR/G Protein

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



BIOLOGICAL ACTIVITY

Description

I-BOP is an agonist for thromboxane A2 receptor (TP) with a K_D of 0.61 nM. I-BOP promotes proliferation through activation of PI3K pathway in vascular smooth muscle[1]. I-BOP dose-dependently biphasicly affects the excitatory postsynaptic potential (e.p.s.p.) in hippocampal neurons[2].

In Vitro

I-BOP (1-100 nM) activates the MAP kinase, stimulates the tyrosine phosphorylation, and thus causes the activation of PI3K signaling pathway[1].

I-BOP (0.1-3 μM) enhances the synaptic transmission in hippocampal CA1 neuron at low concentration by increasing the neurotransmitter release, inhibits the excitatory synaptic transmission in hippocampal CA1 neuron through reduction of membrane input resistance at high concentration[2].

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

Western Blot Analysis[1]

Cell Line:	A7r5.HEL.TP cell
Concentration:	1-100 nM
Incubation Time:	24 h
Result:	Increased phosphorylated tyrosine.

REFERENCES

[1]. Morinelli TA, et al., Tyrosine phosphorylation of phosphatidylinositol 3-kinase and of the thromboxane A2 (TXA2) receptor by the TXA2 mimetic I-BOP in A7r5 cells. Biochem Pharmacol. 1997 Jun 15;53(12):1823-32.

[2]. Hsu KS, et al., Thromboxane A2 agonist modulation of excitatory synaptic transmission in the rat hippocampal slice. Br J Pharmacol. 1996 Aug;118(8):2220-7.

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

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