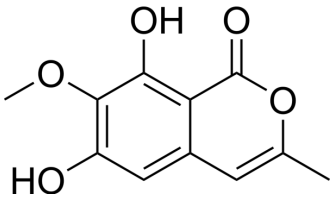
Reticulol

Cat. No.:	HY-120241
CAS No.:	26246-41-3
Molecular Formula:	$C_{11}H_{10}O_5$
Molecular Weight:	222.19
Target:	Phosphodiesterase (PDE)
Pathway:	Metabolic Enzyme/Protease
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Reticulol (K 251-1) is an inhibitor of cyclic adenosine 3', 5'-monophosphate phosphodiesterase. Reticulol shows antitumor activity independent with cell cycle arrest or apoptosis. Reticulol inhibits cell growth of murine melanoma cells and human lung tumor cells. Reticulol protects its lung metastasis via the bloodstream by inhibiting the growth of B16F10 melanoma[1] [2].
In Vitro	Reticulol (25-200 μM) shows a potent cytotoxicity against the human lung tumor cell line A427 and the mouse melanoma cell line B16F10[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	Reticulol (10 mg/kg, 50 mg/kg; iv; day 3 and day 5 after tumor implanted) inhibits tumor growth in mice bearing B16F10 melanoma, and shows lung metastasis-blocking effect[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	Pathogen-free female C57BL/6J mice[1]
Dosage:	10 mg/kg, 50 mg/kg
Administration:	IV via the tail vein; day 3 and day 5 after tumor implanted
Result:	Inhibited tumor growth.

REFERENCES

[1]. Furutani Y, et al. Reticulol, an inhibitor of cyclic adenosine 3', 5'-monophosphate phosphodiesterase. J Antibiot (Tokyo). 1975 Jul;28(7):558-60.

[2]. Lim DS, et al. Antitumor efficacy of reticulol from Streptoverticillium against the lung metastasis model B16F10 melanoma. Lung metastasis inhibition by growth inhibition of melanoma. Chemotherapy. 2003 Jun;49(3):146-53.

[3]. Furutani Y, et al. Reticulol, an inhibitor of cyclic adenosine 3', 5'-monophosphate phosphodiesterase. J Antibiot (Tokyo). 1975 Jul;28(7):558-60.

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

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