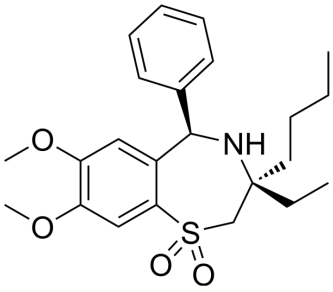
264W94

Cat. No.:	HY-19264
CAS No.:	178961-24-5
Molecular Formula:	$C_{23}H_{31}NO_4S$
Molecular Weight:	417.56
Target:	Apical Sodium-Dependent Bile Acid Transporter
Pathway:	Membrane Transporter/Ion Channel
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	264W94 is a potent ileal bile acid transporter (IBAT) inhibitor and a new cholesterol lowering agent. 264W94 has CYP7A1 induction, and antilipemic action[1].
IC_{50} & Target	IBAT[1]
In Vitro	264W94 (0, 0.1, 0.25, 0.5 μM) inhibits human IBAT-specific transport of 5 μM TC by 14% to 75% in a concentration-dependent manner with IC_{50} of 0.25 μM in CHO-hIBAT cells[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	264W94 (orally; 0.03-1.0 mg/kg; twice a day for 3.5 days) dose-dependently attenuates diet-induced increases in serum LDL+VLDL-C, as well as the decrease in HDL-C[1]. 264W94 (orally; 0.003, 0.01, 0.03, 0.1 mg/kg; twice a day for 2 days) increases fecal excretion of ^{75}SeHCAT in a dose-dependent manner[1]. 264W94 (0.001, 0.01, 0.1, 1, and 10 mg/kg; twice a day for 2 weeks) reduces dose-dependently plasma glucose in male ZDF (ZDF/GmiCrl-fa/fa) rats. Treatment of 264W94 prevents the decline of insulin dose-dependently without an increase in proinsulin levels[2]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	Male Sprague Dawley rats (CD, Charles River, 270-310 gm)[1]
Dosage:	0.03, 0.1, 0.3, 1.0 mg/kg
Administration:	Orally; twice a day (9:00 am and 3:30 pm) for 3.5 days
Result:	Dose-dependently attenuated diet-induced increases in serum LDL+VLDL-C, as well as the decrease in HDL-C.

REFERENCES

[1]. Root C, et al. Ileal bile acid transporter inhibition, CYP7A1 induction, and antilipemic action of 264W94. J Lipid Res. 2002 Aug;43(8):1320-30.

[2]. Chen L, et al. Inhibition of apical sodium-dependent bile acid transporter as a novel treatment for diabetes. Am J Physiol Endocrinol Metab. 2012 Jan 1;302(1):E68-76.

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

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