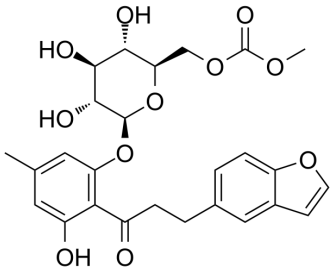
T-1095

Cat. No.:	HY-106158
CAS No.:	209746-59-8
Molecular Formula:	$C_{26}H_{28}O_{11}$
Molecular Weight:	516.49
Target:	SGLT
Pathway:	Membrane Transporter/Ion Channel
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	T-1095 is a selective and orally active Na^+-glucose cotransporter (SGLT) inhibitor with IC_{50}s of 22.8 μM and 2.3 μM for human SGLT1 and SGLT2, respectively. T-1095 can be used for diabetes research[1].	
IC_{50} & Target	hSGLT1 22.8 μM (IC_{50})	hSGLT2 2.3 μM (IC_{50})
In Vivo	T-1095 is absorbed into the circulation via oral administration, is metabolized to the active form, T-1095A, and suppresses the activity of SGLTs in the kidney[1]. Orally administered T-1095 (3-30 mg/kg) increases urinary glucose excretion in diabetic animals, thereby decreasing blood glucose levels[1]. With long-term T-1095 (0.01% or 0.1% T-1095 mixed diet; for 28 days) treatment, both blood glucose and HbA1c levels were reduced in streptozotocin (STZ)-induced diabetic rats and yellow KK mice. In addition, there was amelioration of abnormal carbohydrate metabolism, i.e., hyperinsulinemia and hypertriglyceridemia, and of the development of microalbuminuria, in yellow KK mice[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.	

REFERENCES

[1]. A Oku, et al. T-1095, an inhibitor of renal Na+-glucose cotransporters, may provide a novel approach to treating diabetes. Diabetes. 1999 Sep;48(9):1794-800.

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