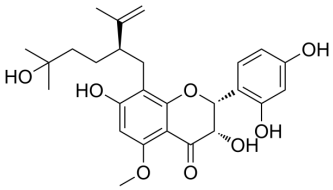
Kushenol K

Cat. No.:	HY-117010
CAS No.:	101236-49-1
Molecular Formula:	$C_{26}H_{32}O_8$
Molecular Weight:	472.53
Target:	Cytochrome P450; HSV; SGLT
Pathway:	Metabolic Enzyme/Protease; Anti-infection; Membrane Transporter/Ion Channel
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Kushenol K, a flavonoid antioxidant isolated from the roots of Sophora flavescens. Kushenol K is a cytochrome P-450 3A4 (CYP3A4) inhibitor with a K_i value of 1.35 μM[1]. Kushenol K shows weak antiviral activity against HSV-2 (EC_{50} of 147 μM)[2]. Kushenol K also inhibits the activity of SGLT1 and SGLT2[3].			
IC_{50} & Target	CYP3A4 1.35 μM (Ki)	CYP3	SGLT1	SGLT2
	HSV-2 147 μM (EC50)			
In Vitro	When Midazolam is used as the substrate of CYP3A4, Kushenol K exhibits the strong inhibition with an IC_{50} values of 1.62 μM [1]. At a concentration of 50 μM, the inhibition rate of Kushenol K on SGLT1 is 29.7%, and the inhibition rate on SGLT2 is 43.7%[3] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.			

REFERENCES

[1]. Yannan Li, et al. Drug interaction study of flavonoids toward CYP3A4 and their quantitative structure activity relationship (QSAR) analysis for predicting potential effects. Toxicol Lett. 2018 Sep 15;294:27-36.

[2]. E R Woo, et al. A new prenylated flavonol from the roots of Sophora flavescens. J Nat Prod. 1998 Dec;61(12):1552-4.

[3]. Seizo Sato, et al. Na+-glucose cotransporter (SGLT) inhibitory flavonoids from the roots of Sophora flavescens. Bioorg Med Chem. 2007 May 15;15(10):3445-9.

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