SLLK, Control Peptide for TSP1 Inhibitor(TFA)

Cat. No.: HY-P0301A

Molecular Formula: $C_{23}H_{43}F_3N_6O_7$

Molecular Weight: 572.62

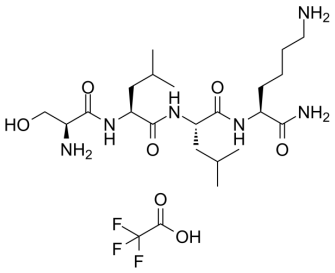
Sequence: Ser-Leu-Leu-Lys-NH2

Sequence Shortening: SLLK-NH2

Target: Others

Pathway: Others

Storage: Sealed storage, away from moisture
Powder -80°C 2 years
-20°C 1 year
* In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)



SOLVENT & SOLUBILITY

In Vitro

H_2O : 125 mg/mL (218.29 mM; Need ultrasonic)

Preparing Stock Solutions	Concentration / Solvent / Mass	1 mg	5 mg	10 mg
	1 mM	1.7464 mL	8.7318 mL	17.4636 mL
	5 mM	0.3493 mL	1.7464 mL	3.4927 mL
	10 mM	0.1746 mL	0.8732 mL	1.7464 mL

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description

SLLK, Control Peptide for TSP1 Inhibitor (TFA) is a control peptide for LSKL, which is a Thrombospondin (TSP-1) inhibitor.

In Vivo

Akita mice treated with 30 mg/kg LSKL have significantly increased nephrin expression, greater than twofold, compared with renal lysates from either saline controls or SLLK-treated mice[1].TGF-β1 is significantly lower (0.10±0.01 pg/mL) in the plasma of mice receiving LSKL compared with that in plasma of mice receiving SLLK control peptide at day 42 (0.20±0.02 pg/mL; P=0.0001). MRNA expression is assessed in the suprarenal aortic lysates obtained from mice receiving SLLK and LSKL peptides[2].

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

PROTOCOL

Animal

Mice[1]

Administration [1]	The i.p. injection of LSKL, SLLK, or saline began 2 weeks after uninephrectomy and continues thrice weekly for 15 weeks. For the low-dosage treatment regimen, each group of 20 mice receives 3 mg/kg body weight of peptide (LSKL or SLLK) per injection or saline (100 μL/10 g body weight per injection). For the high-dosage treatment regimen, Akita mice are given i.p. injections of LSKL or SLLK peptide at 30 mg/kg body weight per injection or saline (100 μL/10 g body weight per injection)[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Lu A, et al. Blockade of TSP1-dependent TGF-β activity reduces renal injury and proteinuria in a murine model of diabetic nephropathy. Am J Pathol. 2011 Jun;178(6):2573-86.

[2]. Krishna SM, et al. A peptide antagonist of thrombospondin-1 promotes abdominal aortic aneurysm progression in the angiotensin II-infused apolipoprotein-E-deficient mouse. Arterioscler Thromb Vasc Biol. 2015 Feb;35(2):389-98.

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