

KRpep-2d

Cat. No.:	HY-P3277	
CAS No.:	2098181-84-9	
Molecular Formula:	C ₁₀₈ H ₁₈₂ N ₄₄ O ₂₅ S ₂	
Molecular Weight:	2561.02	Ac-RRRRCPLYISYDPVCRRRR-NH ₂ (disulfide bridge: Cys ₅ -Cys ₁₅)
Sequence Shortening:	Ac-RRRRCPLYISYDPVCRRRR-NH ₂ (disulfide bridge: Cys5-Cys15)	
Target:	Ras	
Pathway:	GPCR/G Protein; MAPK/ERK Pathway	
Storage:	Sealed storage, away from moisture and light, under nitrogen	
	Powder -80°C 2 years	
	-20°C 1 year	
	* In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture and light, under nitrogen)	

SOLVENT & SOLUBILITY

In Vitro	H ₂ O : 50 mg/mL (19.52 mM); Need ultrasonic)					
	Preparing Stock Solutions	Solvent Concentration	Mass	1 mg	5 mg	10 mg
		1 mM		0.3905 mL	1.9523 mL	3.9047 mL
		5 mM		0.0781 mL	0.3905 mL	0.7809 mL
		10 mM		0.0390 mL	0.1952 mL	0.3905 mL
Please refer to the solubility information to select the appropriate solvent.						
In Vivo	1. Add each solvent one by one: PBS Solubility: 50 mg/mL (19.52 mM); Clear solution; Need ultrasonic					

BIOLOGICAL ACTIVITY

Description	KRpep-2d is a potent K-Ras inhibitor and inhibits proliferation of K-Ras-driven cancer cells. KRpep-2d can be used for cancer research ^[1] .
IC₅₀ & Target	K-RAS
In Vitro	KRpep-2d has cyclic structure with importance for K-Ras inhibitory activity. Leu ⁷ , Ile ⁹ and Asp ¹² are critical amino acid residues for the K-Ras inhibitory activity of KRpep-2d ^[1] . KRpep-2d (10-30 μM) has inhibitory activity of A427 cells with the proliferation rates of 68.3% (10 μM) and 48.3% (10 μM) ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Niida A, et al. Investigation of the structural requirements of K-Ras(G12D) selective inhibitory peptide KRpep-2d using alanine scans and cysteine bridging. Bioorg Med Chem Lett. 2017 Jun 15;27(12):2757-2761.

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

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