

## KRpep-2d

<b>Cat. No.:</b>	HY-P3277	
<b>CAS No.:</b>	2098181-84-9	
<b>Molecular Formula:</b>	C <sub>108</sub> H <sub>182</sub> N <sub>44</sub> O <sub>25</sub> S <sub>2</sub>	
<b>Molecular Weight:</b>	2561.02	Ac-RRRRCPLYISYDPVCRRRR-NH <sub>2</sub> (disulfide bridge: Cys <sub>5</sub> -Cys <sub>15</sub> )
<b>Sequence Shortening:</b>	Ac-RRRRCPLYISYDPVCRRRR-NH <sub>2</sub> (disulfide bridge: Cys5-Cys15)	
<b>Target:</b>	Ras	
<b>Pathway:</b>	GPCR/G Protein	
<b>Storage:</b>	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

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

### BIOLOGICAL ACTIVITY

<b>Description</b>	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 <sup>[1]</sup> .
<b>IC<sub>50</sub> &amp; Target</b>	K-RAS
<b>In Vitro</b>	KRpep-2d has cyclic structure with importance for K-Ras inhibitory activity. Leu <sup>7</sup> , Ile <sup>9</sup> and Asp <sup>12</sup> are critical amino acid residues for the K-Ras inhibitory activity of KRpep-2d <sup>[1]</sup> . 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) <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

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## REFERENCES

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[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.

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

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