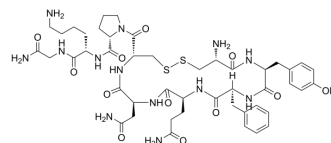


## Lysipressin

<b>Cat. No.:</b>	HY-P0004
<b>CAS No.:</b>	50-57-7
<b>Molecular Formula:</b>	C <sub>46</sub> H <sub>65</sub> N <sub>13</sub> O <sub>12</sub> S <sub>2</sub>
<b>Molecular Weight:</b>	1056.22
<b>Sequence:</b>	Cys-Tyr-Phe-Gln-Asn-Cys-Pro-Lys-Gly-NH <sub>2</sub> (Disulfide bridge: Cys1-Cys6)
<b>Sequence Shortening:</b>	CYFQNCPKG-NH <sub>2</sub> (Disulfide bridge: Cys1-Cys6)
<b>Target:</b>	Adenylate Cyclase; Oxytocin Receptor
<b>Pathway:</b>	GPCR/G Protein
<b>Storage:</b>	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<sub>2</sub>O : ≥ 100 mg/mL (94.68 mM)  
 \* "≥" means soluble, but saturation unknown.

Concentration	Solvent	Mass		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	0.9468 mL	4.7339 mL	9.4677 mL
	5 mM	0.1894 mL	0.9468 mL	1.8935 mL
	10 mM	0.0947 mL	0.4734 mL	0.9468 mL

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

### BIOLOGICAL ACTIVITY

#### Description

Lysipressin (Lysine vasopressin) is antidiuretic hormone that have been found in pigs. Lysipressin activates Oxytocin receptors and adenylate-cyclase. Lysipressin adjusts blood pressure and heart rate. Lysipressin shows antinociceptive activity<sup>[1][2][3][4][5]</sup>.

#### In Vitro

Lysipressin (1 nM-1 μM) increases porcine myometrial [Ca<sup>2+</sup>]<sub>i</sub> and contractility predominantly by activating oxytocin receptors<sup>[3]</sup>.

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

#### In Vivo

Lysipressin (150-500 ng, ICV) shows antinociceptive activity in rats, with increasing tail-flick latencies<sup>[4]</sup>.

Lysipressin (0.1-100 μg/kg, i.v.) increases blood pressure and decreases heart rate in dogs<sup>[5]</sup>.

lysine-vasopressin (0.01-10 μg/kg, intracisternal) induces a dose-related decrease in blood pressure and does not change

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heart rate in dogs<sup>[5]</sup>.

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

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## CUSTOMER VALIDATION

- Sci Rep. 2020 Oct 2;10(1):16383.
- Research Square Preprint. 2020 Mar 27.

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## REFERENCES

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- [2]. Crankshaw D et al. [Arg8]vasopressin-induced contractions of rabbit urinary bladder smooth muscle. Eur J Pharmacol. 1989 Dec 7;173(2-3):183-8.
- [3]. Yu H, et al. Lysine vasopressin-induced increases in porcine myometrial contractility and intracellular Ca<sup>2+</sup> concentrations of myometrial cells: involvement of oxytocin receptors. Biol Reprod. 1995 Mar;52(3):584-590.
- [4]. Kordower JH, et al. Central antinociceptive effects of lysine-vasopressin and an analogue. Peptides. 1982 Jul-Aug;3(4):613-7.
- [5]. Tran LD, et al. Effects of lysine-vasopressin and oxytocin on central cardiovascular control. Br J Pharmacol. 1982 Sep;77(1):69-73.
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**Caution: Product has not been fully validated for medical applications. For research use only.**

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