



## Product Information

### [Lys<sup>8</sup>]-Vasopressin

Product Number **V 6879**

Storage Temperature -0 °C

#### Product Description

Molecular Formula: C<sub>46</sub>H<sub>65</sub>N<sub>13</sub>O<sub>12</sub>S<sub>2</sub>

Molecular Weight: 1,056

CAS Number: 50-57-7

Cys-Tyr-Phe-Gln-Asn-Cys-Pro-Lys-Gly-NH<sub>2</sub>

[Disulfide Bridge: 1-6]

Synonyms: Lysine vasopressin, Lyspressin, [Lys8]VP

[Lys<sup>8</sup>]-Vasopressin is the predominant form of vasopressin present in pigs and marsupials. It has lower vasopressor and antidiuretic activity than [Arg<sup>8</sup>]-vasopressin which is present in humans, cows, horses, and sheep. It is a peptide containing 9 amino acids and one internal disulfide bridge.

When the [Lys8]VP receptor coupled to activation of adenylate cyclase (V2 receptor) is expressed in COS7 cells, [Lys8]VP and [Arg8]VP have equal ligand affinity to the V2[Lys8]VP receptor. The adenylate-cyclase activation by [Lys8]VP was inhibited in COS7 cells by a V2 antagonist.<sup>1</sup>

The effect of [Lys8]VP and other hormones and analogues on the contractility of rabbit urinary bladder smooth muscle *in vitro* have been examined.<sup>2</sup>

The preparation of monoclonal antibodies to vasopressin and their use in studies on vasopressin has been reported.<sup>3</sup>

This peptide is sold on a total weight basis. It has a peptide content of not less than 80% with the balance being salts and water.

#### Precautions and Disclaimer

For Laboratory Use Only. Not for drug, household or other uses.

#### Storage/Stability

No change was detected when a 1 mg/ml aqueous solution was stored for 6 weeks at -20 °C or for 2 days at room temperature. This compound is stable in acid, but unstable in alkaline solutions. The activity is destroyed by thioglycollate.<sup>4</sup>

#### References

1. Gorblev, V., et al., Molecular cloning and functional characterization of V2[8-lysine] vasopressin and oxytocin receptors from a pig kidney cell line. *Eur. J. Biochem.*, **215**, 1-7 (1993).
2. Crankshaw, D., [Arg8]vasopressin-induced contractions of rabbit urinary bladder smooth muscle. *Eur. J. Pharmacol.*, **173**, 183-188 (1989).
3. Valiquette, G., and Neubort, S., Monoclonal antibodies: uses in studies on vasopressin. *Methods Enzymol.*, **168**, 574-587 (1989).
4. Data for Biochemical Research, 3rd ed., Dawson, R. M. C., et al., Oxford University Press (New York, NY: 1986), pp. 31-32.

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