

Product Data Sheet

Product Name: Copeptin (human)

Cat. No.: GA21279

Chemical Properties

Cas. No. 78362-34-2

Formula $C_{177}H_{279}N_{49}O_{58}$

M.Wt 4021.46

Solubility Soluble in DMSO

Storage Store at -20°C

General tips For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT, or blue ice upon request.

Structure



Background

Copeptin is a peptide composed of 39-amino acids that is produced primarily in paraventricular neurons and the supraoptic nucleus of the hypothalamus^[1].

Copeptin may aid in the folding of vasopressin during transport. Vasopressin has a direct antidiuretic effect on the kidneys and also causes constriction of peripheral blood vessels. Copeptin can be used as a vasopressin surrogate in clinical test^[2-4].

In vivo—In the analysis of systemic anaphylaxis, the body temperature of the model group

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

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA

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(Compound 48/80) was significantly lower than that of the control group. Compound 48/80 induced increased serum concentrations of HIS, TNF- α and IL-8^[8]. Compound 48/80-induced MC degranulation produced anticonvulsive effects against PTZ-induced epileptic seizures by extending the onset time of both myoclonic-jerk and generalized tonic-clonic seizure, and by shortening the duration of generalized tonic-clonic seizure^[9].

References:

- [1]. Baranowska B, Kochanowski J. Copeptin - a new diagnostic and prognostic biomarker in neurological and cardiovascular diseases. *Neuro Endocrinol Lett.* 2019 Dec;40(5):207-214. PMID: 32112544.
- [2]. Balanescu S, Kopp P, Gaskill MB, Morgenthaler NG, Schindler C, Rutishauser J. Correlation of plasma copeptin and vasopressin concentrations in hypo-, iso-, and hyperosmolar States. *J Clin Endocrinol Metab.* 2011 Apr;96(4):1046-52. doi: 10.1210/jc.2010-2499. Epub 2011 Feb 2. PMID: 21289257.
- [3]. Morgenthaler NG, Struck J, Alonso C, Bergmann A. Assay for the measurement of copeptin, a stable peptide derived from the precursor of vasopressin. *Clin Chem.* 2006 Jan;52(1):112-9. doi: 10.1373/clinchem.2005.060038. Epub 2005 Nov 3. PMID: 16269513.
- [4]. Christ-Crain M. Vasopressin and Copeptin in health and disease. *Rev Endocr Metab Disord.* 2019 Sep;20(3):283-294. doi: 10.1007/s11154-019-09509-9. PMID: 31656992.

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