Product Data Sheet

Product Name: Adrenorphin, Free Acid
Cat. No.: GP10102

Chemical Properties

Cas. No.	88866-92-6		
Chemical Name	1-[[4-[2-(azepan-1-yl)ethoxy]phenyl]methyl]-2-(4-hydroxyphenyl)-3-methylindol-5-ol		
SMILES	CC(C)C(C(=O)O)NC(=O)C(CCCN=C(N)N)NC(=O)C(CCCN=C(N)N)NC(=O)C(CCSC)NC(=O)C(CC1=CC=CC=C1)NC(=O)CNC(=O)CNC(=(		
Formula	$C_{44}H_{68}N_{14}O_{10}S$	M.Wt	985.16
Solubility	≥ 98.5mg/mL in DMSO	Storage	Store at -20°C
General tips	For obtaining a higher solubility , please warm the tube at 37 ℃ and shake it in the ultrasonic bath for a while.Stock solution can be several months.		
Shipping Condition	Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.		
Structure	Adrenorphin, Free Acid		

Background

Adrenorphin, also sometimes referred to as metorphamide, is an endogenous, C-terminally amidated, opioid octapeptide that is produced from proteolytic cleavage of proenkephalin A and is widely distributed throughout the mammalian brain[(1)]. It was named based on the fact that it was originally detected in human phaeochromocytoma tumour derived from the adrenal medulla, and was subsequently found in normal human and bovine adrenal medulla as well. Adrenorphin exhibits potent opioid activity, acting as a balanced μ- and κ-opioid receptor agonist while having no effects on δ-opioid receptors[(2)]. It possesses analgesic and respiratory deppresive properties[(3)].

References:
1. Matsuo H, Miyata A, Mizuno K (1983). "Novel C-terminally amidated opioid peptide in human phaeochromocytoma tumour". Nature 305 (5936): 721–3.
2. Weber E, Esch FS, Böhlen P et al. (December 1983). "Metorphamide: isolation, structure, and biologic activity of an amidated opioid octapeptide from bovine brain". Proceedings of the National Academy of Sciences of the United States of America 80 (23): 7362–6.
3. Xu SF, Lu WX, Zhou KR et al. (April 1985). "The analgesic and respiratory depressant actions of metorphamide in mice and rabbits". Neuropeptides 6 (2): 121–31.

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