

Name	Dynorphin A (1-13) Acetate
Cat #	PP-1190
Size	1 g, 10 g, 100, g and bulk custom packages
CAS#	72957-38-1
Mol. Mass	1603.97
Formula	C ₇₅ H ₁₂₆ N ₂₄ O ₁₅
Sequence	H-Tyr-Gly-Gly-Phe-Leu-Arg-Arg-Ile-Arg-Pro-Lys-Leu-Lys-OH
Purity	>95%

Dynorphins constitute a class of opioid peptides that arise from the precursor protein prodynorphin. When prodynorphin is cleaved during processing by proprotein convertase (PC2), multiple active peptides are released: dynorphin A, dynorphin B, and α/β -neo-endorphin. Depolarization of a neuron containing prodynorphin stimulates PC2 processing, which occurs within synaptic vesicles in the presynaptic terminal. Occasionally, prodynorphin is not fully processed, leading to the release of “big dynorphin.” Structurally, this 32-amino acid molecule consists of both dynorphin A and dynorphin B. Dynorphin A, dynorphin B, and big dynorphin all contain a high proportion of basic amino acid residues, particularly lysine and arginine, as well as many hydrophobic residues. Although dynorphins are found widely distributed in the CNS, they have the highest concentrations in the hypothalamus, medulla, pons, midbrain, and spinal cord.

