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>>Entry Name: Endorphins

**CAS Registry Number:** 60118-07-2

**Related CAS Registry Numbers(s):** 59004-96-5 59887-17-1 60149-45-3 60893-02-9 69599-55-9 79495-86-6 119306-30-8 138914-57-5

**Type of Compound Code(s):** AH0450 VV0450 XA5730

H-Tyr-Gly-Gly-Phe-Met-Thr-Ser-Glu-Lys-Ser-Gln-Thr-Pro-Leu-Val-Thr-Leu-Phe-Lys-Asn-Ala-Ile-Ile-Lys-Asn-Ala-Tyr-Lys-Lys-Gly-Glu-OH

**General Statement:** Struct. shown is that of human  $\beta$ -endorphin

**Biological Source:** Isol. from pituitary glands

**Use/Importance:** Endogenous opioid peptides showing analgesic and behavioural effects in mammals.  $\beta$ -Endorphin is generally more potent than  $\alpha$ - and  $\gamma$ -endorphins

**Other Data:** Endorphins have also been isol. from non-mammalian spp., e.g. salmon

>>Variant:  $\alpha$ -Endorphin

**CAS Registry Number:** 61512-76-3

**Type of Compound Code(s):** AH0450 VV0450

>>Derivative:  $\alpha$ -Endorphin (human)

**CAS Registry Number:** 59004-96-5

**Other Data:** Struct. corresponds to amino acid sequence 61-76 of  $\beta$ -lipotropin

**Fluka:** 45176

**Sigma:** E8129

>>Variant:  $\beta$ -Endorphin

**Synonym(s):**  $\beta$ -EP

**CAS Registry Number:** 60617-12-1

**Type of Compound Code(s):** XA0670

**Use/Importance:** Potent analgesic

**Other Data:** Endogenous morphine-like untriacontapeptides present in human, porcine, ovine, and bovine pituitaries, with amino acid sequence identical to the 61-91 portion of their respective  $\beta$ -lipotropins

>>Derivative:  $\beta$ -Endorphin (human)

**Synonym(s):**  $\beta_h$ -Endorphin. 61-91- $\beta$ -Lipotropin (human)

**CAS Registry Number:** 61214-51-5

**Type of Compound Code(s):** AH0450 VV0450

**Optical Rotation:**  $[\alpha]_D^{20} -74$  (c, 0.3 on 0.3M AcOH)

**Fluka:** 45177

**Sigma:** E8254

>>Derivative:  $\beta$ -Endorphin (sheep)

**Type of Compound Code(s):** AH0450 VV0450

**Other Data:** As human form except -27-L-His and -31-L-Gln

>>Variant:  $\gamma$ -Endorphin

**CAS Registry Number:** 61512-77-4

**Type of Compound Code(s):** AH0450 VV0450

**Other Data:** Struct. corresponds to amino acid sequence 61-77 of  $\beta$ -lipotropin

**Sigma:** E8880

**References:**