



PRODUCT DATA SHEET

Product: Elcatonin

Cat. No.: BP-027 (1 mg)

Background:

Elcatonin is a calcitonin derivative, which is transformed from eel's calcitonin by changing the S-S bond into the stable C-N bond. It inhibits the absorption and autolysis of bones, thus leads to blood calcium descending. In addition, it inhibits the bone salts dissolving and transferring and promotes the excretion of calcium and phosphorus in urine. Meanwhile, it inhibits the renal tubules from reabsorbing calcium, phosphorus and sodium and keeps blood calcium at normal level. It is mainly used for remitting or eliminating the pain caused by osteoporosis.

Description:

Synthetic Elcatonin is a single, non-glycosylated polypeptide chain containing 31 amino acids, and a molecular formula of $C_{148}H_{244}N_{42}O_{47}$.

Molecular Weight:

3.3638 kDa

Amino Acid Sequence:

Ser-Asn-Leu-Ser-Thr-Asu-Val-Leu-Gly-Lys-Leu-Ser-Gln-Glu-Leu-His-Lys-Leu-Gln-Thr-Tyr-Pro-Arg-Thr-Asn-Val-Gly-Ala-Gly-Thr-Pro-NH₂.

Format:

Sterile filtered white lyophilized powder with no additives.

Reconstitution:

It is recommended to reconstitute the lyophilized Elcatonin in sterile 18 MΩ-cm H₂O at not less than 100 µg/mL, which can then be further diluted to other aqueous solutions.

Storage:

Lyophilized protein is stable for at least 3 weeks at room temperature. Long term storage should be below -18°C, desiccated. Upon reconstitution, Elcatonin should be stored at 4°C between 2-7 days, and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Aliquot to avoid freeze/thaw cycles.

Purity:

>98% determined by RP-HPLC, and SDS-PAGE.

Limitations:

For *in vitro* research use only. Not for use in diagnostics or in humans.

Warranty:

No warranties, expressed or implied, are made regarding the use of this product. **KAMIYA BIOMEDICAL COMPANY** is not liable for any damage, personal injury, or economic loss caused by this product.