Ipamorelin

Purity: >98% (HPLC on request) | Molecular Formula: C38H49N9O5
Molecular Weight: 711.863 | Sequence: Aib-His-D-2-Nal-D-Phe-Lys-NH

DESCRIPTION:

Ipamorelin is a selective GH-Secretagogue and ghrelin receptor agonist. The potency of ghrelin stimulation can be compared to GHRP6 with less appetite stimulation properties. However, unlike other GH-Secretagogues this pentapeptide doesn't release the same volumes of cortisol, acetylcholine, prolactin and aldosterone. It is for this reason Ipamorelin has been considered the first selective, and best, GH Secretagogue.

PROTOCOL:

Content & Potency: Provided as a 5mg lyophilized vial
Vial reconstitution: 2ml sterile water for injection
Suggested dosage: Inject 100-200mcg (0.04-0.08ml or 4-8units) subcutaneously 5 out of 7 days per week fasting 2- 3 hours prior to injection

***We suggest using the Ipamorelin in combination with CJC 1295 as it provides a synergistic effect, generating five times the benefits of using the CJC 1295 or Ipamorelin alone. The combination allows for maximized release of GH because the CJC 1295 and Ipamorelin have different mechanisms of action and work on different receptors (GHRH-R & Ghrelin-R).

CLINICAL RESEARCH:

Pharmacokinetic-Pharmacodynamic Modeling of lpamorelin, a Growth Hormone Releasing Peptide, in Human Volunteers

To examine the pharmacokinetics (PK) and pharmacodynamics (PD) of ipamorelin, a growth hormone (GH) releasing peptide, in healthy volunteers. A trial was conducted with a dose escalation design comprising 5 different infusion rates (4.21, 14.02, 42.13, 84.27 and 140.45 nmol/kg over 15 minutes) with eight healthy male subjects at each dose level. Concentrations of ipamorelin and growth hormone were measured. The PK parameters showed dose-proportionality, with a short terminal half-life of 2 hours, a clearance of 0.078 L/h/kg and a volume of distribution at steady-state of 0.22 L/kg. The time course of GH stimulation by ipamorelin showed a single episode of GH release with a peak at 0.67 hours and an exponential decline to negligible GH concentration at all doses. The ipamorelin-GH concentration relationship was characterized using an indirect response model and population fitting. The model employed a zero-order GH release rate over a finite duration of time to describe the episodic release of GH. lpamorelin induces the release of GH at all dose levels with the concentration (SC50) required for half-maximal GH stimulation of214 nmol/ Land a maximal GH production rate of 694 mlU/L/h. The inter-individual variability of the PD parameters was larger than that of the PK parameters. The proposed PK/ PD model provides a useful characterization of ipamorelin disposition and GH responses across a range of doses.

Gobburu, Jogarao & Agers0, Henrik & J. Jusko, William & Ynddal, Lars. (1999). Pharmacokineric-Pharmacodynamic Modeling ofl pamorelin, a Growth Hormone Releasing Peptide, in Human Volunreers. Pharmaceutical research. 16. 1412-6.