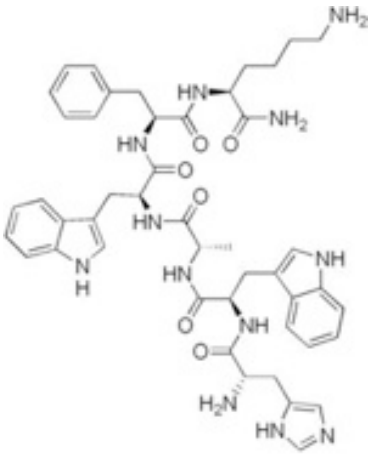
GHRP-6
5 mg /ml

Alley

1. Description
GHRP-6 (Growth Hormone Releasing Peptide – 6) is a hexapeptide with a chain comprised of 6 amino acids. It is one of several synthetic met-enkephalin analogs that include unnatural D-amino acids that were developed for their growth hormone releasing activity and are called growth hormone secretagogues. GHRP-6 is a true HGH secretagogue.
This growth hormone releasing peptide is distinct from GHRH and do not act at the GHRH receptor, but instead acts at the growth hormone secretagogue receptor, now renamed as the ghrelin receptor.



Molecular Formula: $C_{46}H_{56}N_{12}O_6$
Molecular Weight: 873.01
CAS No.: 87616-84-0
Sequence: His-D-Trp-Ala-Trp-D-Phe-Lys-NH2

GHRP-6 is a sterile, non-pyrogenic, white lyophilized powder intended for subcutaneous or intramuscular injection, after reconstitution with sterile Water for Injection (0,3% m-Cresol).

2. Mechanism of Action

GHRP-6 is not an active fragment of growth hormone releasing hormone (GHRH). Which means it stimulates the body's own secretion of HGH. Human Growth hormone has been shown in studies to promote lean body mass and reduce adiposity (fat). This growth hormone releasing peptide is distinct from GHRH and do not act at the GHRH receptor, but instead acts at the growth hormone secretagogue receptor, now renamed as the gh-relin receptor.

GHRP-6's special sequence is considered to provide a signal to the body to begin secreting Growth Hormone(GH) release while also blocking Somatostatin, a hormone that inhibits Growth Hormone release. Research studies have shown that GHRP-6 stimulation of Growth Hormone has host of beneficial effects such as decreased body fat, increased muscle, and increased strength and stamina so maximizing the production and secretion can be a great addition to improved animal physical shape. Increased amounts of Growth Hormone then can cause the liver to secrete the hormone IGF-1 which has also been implicated in improving the animal body's ability to burn fat and build muscle. Clinical cases have shown that the use of GHRP-6 was associated with increased muscle mass and a reduction of body fat.

GHRP-6 has been one of the most thoroughly studied and is believed to be acting naturally on both pituitary and hypothalamic sites (Fairhall et al. 1995). This has been demonstrated in the primary pituitary cells of rats in a time-dependent and dose-dependent manner. In another study of Fairhall et al. (1995), they concluded that the major target of the GHRP-6 in vivo is the hypothalamus after observing that the GH(Growth Hormone) release induced by the central GHRP-6 administration in guinea pigs was inhibited by the central action of somatostatin. Furthermore, an inhibition by somatostatin with the activated GRF neurons (GRF=Growth Hormone Releasing Factor), induced by GHRP-6, was observed via receptors known to be located on or near the GRF themselves. However, it was also observed that GHRP-6 had no effect on the intracellular cAMP levels unlike that of GHRP-2. This particular experiment further indicated that GHRP-6 is effectively stimulating GH release from somatotrophs through different receptors, the mechanisms of which are not yet known (Chan et al. 1989).

However, some researchers suggest that action and efficiency of growth hormone is dependent on the physical condition of the experimental unit. In humans for example, GH secretion decreases with obesity. This is contrary in the case of the GHRP-6 which showed increased (almost twice that of GHRP) GH responses when administered in obese patients (Cordido et al. 1993). Though obesity has shown affecting the efficiency of the hormone, it was also suggested that GHRP-6's effects, at least at the dose-dependent manners, were found to be sex- and age-independent without being affected by the noadregenic pathways using the a2 adrenergic receptors (Penalva et al. 2008).

3. Adverse reactions

GHRP-6 Peptide is generally very well tolerated by most individuals when used at the recommended dosages of up to 200mcg per injection.

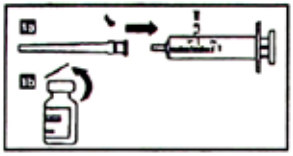
Water Retention: Caused by an increase in aldosterone, cortisol and prolactin. It is more of a problem with GHRP-2 than GHRP-6 . It will usually subside within a few weeks and can be controlled by watching your sodium (salt) intake.

Tiredness: Is usually only noticed for the first few weeks as the body adjusts and can be reduced by taking injections only at night time.

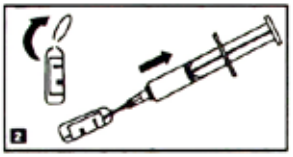
Increased Hunger: Often noticed with the usage of GHRP-6. Should settle after the first few weeks.

4. Instructions for reconstitution

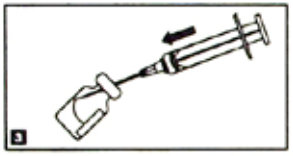
Powder must be dissolved only with the solvent provided.



Picture 1
1a. Apply the needle to the syringe
1b. Remove the plastic cover from the vial



Picture 2
Break the top of the ampoule containing the solvent. Remove the plastic cover of the needle. Make sure the needle is well applied to the syringe. Slowly absorb all the solvent.



Picture 3
Inject all the solvent to the vial. This will create a 3,33mg/ml solution. To prevent foaming, the solvent should be injected into the vial by aiming the stream of liquid against the glass wall.

Picture 4
Following reconstitution, the vial should be swirled with a GENTLE rotary motion until the contents are completely dissolved. DO NOT SHAKE. The resulting solution should be clear and colorless, without particulate matter.

After reconstitution, the vial contains 1 ml liquid and 5mg GHRP-6.
That means 5000mcg/ml. For example:
one injection with 200mcg GHRP-6 needs 0,04ml (or 4 units on Insulin Syringe),
one injection with 150mcg needs 0,03ml (or 3 units on Insulin Syringe) etc.

5. Dosage

Recommended dosage of GHRP-6 :

- 100mcg (0.10mg) once per day for anti-aging.
- Between 400-600 mcgs, divided in two or three doses per day for muscle gain and fat loss, directed via subcutaneous injections.

Optimal times for injection are: first thing in the morning, pre or post workout and at night before bed.

Maximum Dose per injection: 200-250 mcg

Injections per vial: 25 x 200mcg dosages

Amount to Inject: If you have used 1ml of water for mixing then a 200mcg dosage = 0.04ml (or 4 units on Insulin Syringe).

For optimal results, the user must take care also about diet restrictions:

• **Pre-injection**: Fat and carbohydrates both blunt the release of Growth Hormone (which is the whole purpose of taking GHRP-6), therefore you should avoid any meals/beverages high in fat for 2-3 hours before your injection. T**he only exception to this rule is if you are combining your GHRP-6 peptide with a CJC-1295 peptide, in which case you only need to wait 1 hour after eating before your injection** as the combination has been proven to overcome the negative impact by food on GH release.

• **Post-injection:** GHRP-6 takes approximately 5-30 minutes to exert its effect on GH release in the body, therefore you should wait for at least 30 minutes after your injection before consuming any food or beverages (besides water) as they may diminish the effectiveness of your injection.

6. Storage

- This product can be used not more than 3 years from the production date (see box)
- After reconstitution, may be stored for a maximum of 14 days in a refrigerator at 2°C - 8°C.
- Store vials in an upright position.
- Store in a refrigerator (2°C - 8°C). Keep in the outer carton in order to protect from light.
- For one month can be stored at room temperature.

THIS PRODUCT IS INTENDED FOR RESEARCH PURPOSES ONLY