



# Chengdu KaiJie Biopharm Co., Ltd.

Segment 1, Industrial Road, Dayi county, Chengdu, Sichuan, P. R. China, 611330

Tel: 86-28-88208155, Fax: 86-28-88203632 WEB: [www.kjpep.com](http://www.kjpep.com)

## About Author

Chengdu Kaijie Biopharm Co, Ltd. (KJBP) is one of leading peptide manufacturers in Asia. With its highest capacity of production in China and the outstanding quality of peptide products, Kaijie holds a unique position.

## KAIJIE PRODUCT DESCRIPTION

GHRP2, 5mg/vial

Molecular Formula: C45H55N9O6 Molecular Weight: 817.9

CAS No.: 158861-67-7

Sequence: D-Ala-D- $\beta$ -Nal-Ala-Trp-D-Phe-Lys-NH<sub>2</sub>

For RESEARCH PURPOSES ONLY

## EFFECT AND USAGE

Growth Hormone Releasing Peptide 2(GHRP2) substantially stimulates the pituitary gland's increased natural production of the body's own endogenous human growth hormone (HGH). This therapy consists of daily periodic sub-lingual dosing. Growth Hormone releasing peptide 2, GHRP2 has shown on it's own to robustly increase IGF-1 levels, and even greater results occurred when used with Growth Hormone Releasing Hormone (GHRH) to which also stimulates the pituitary gland to produce increased natural secretion of human growth hormone. This also boosts the hypothalamus function as well.

GHRP- 2 is a true hGH secretagogue. It stimulates the body's own secretion of hGH as explained herein. Human Growth hormone has been shown in studies to promote lean body mass and reduce adiposity (fat). GHRP 2 has demonstrated that it is very effective at stimulating GH production in test subjects. It has a short half life with peak concentrations occurring around 15 minutes and not longer than 60 minutes after administration. Effective dosages in humans range from 100mcg to 3mcg/Kg of body weight and shows to be equally effective in both men and women.

Growth hormone releasing peptide is a commercially synthesized, non-natural super-analog of the GHRP-6 which is capable of potent stimulatory effect on growth hormone (GH) secretion with slight stimulator effect in PRL, ACTH and levels of cortisol (Arvat et al. 1997). It is also a synthetic agonist of ghreline that is binding with the growth hormone (GH) secretagogue receptor. GHRP-2 has been shown to affect and induce growth hormone secretion. The response of natural physiologic system includes increase in levels of calcium ion influx alongside with increased release of growth hormones in response to this peptide (Wu et al. 1994). Its chemical structure and other chemical properties are described below:



## Chengdu KaiJie Biopharm Co., Ltd.

Segment 1, Industrial Road, Dayi county, Chengdu, Sichuan, P. R. China, 611330

Tel: 86-28-88208155, Fax: 86-28-88203632 WEB: [www.kjpep.com](http://www.kjpep.com)

Furthermore, dose-dependent investigations have proven that this analog is similar in terms of potency with GRF and was even tenfold more potent than earlier generations of GH-releasing secretors such as GHRP-6 and GHRP-1 (Wu et al. 1994). Because of such effects, this hormone has been used for the treatment of different monkey deficiencies and catabolic states. Studies of Laferre et al. (2005) have shown that GHRP-2 acts like ghrelin which induces food intake in monkeys and also stimulates GH secretion. This has been demonstrated when GH levels rose significantly during GHRP-2 infusion (AUC  $5550 \pm 1090 \mu\text{g/L}/240 \text{ min}$  vs.  $412 \pm 161 \mu\text{g/L}/240 \text{ min}$ ,  $p = 0.003$ ). Also, GHRP-2 has shown to be inducing secretion of cAMP in cells in a manner similar to that of GRF. GHRP-2 supplication has also acted as an anti-inflammatory effect in arthritic rats and seems to be mediated by ghrelin receptors directly on immune cells (Granado et al. 2004). However, it is important to note that the level of results with the action of GHRP-2 differs accordingly with species specifically in the response of the pituitary somatotrophs probably because of differences in the subtypes of GHRP receptors (Wu et al. 1996). Its action however in the physiologic system is blocked by GRF receptor antagonist which acts through a different receptor to that employed by earlier GHRPs.