ALPHA DIAGNOSTIC INTERNATIONAL

LIFE TECH Life Technologies™ Your Molecular & Cell Technology Partner

Product Specification Sheet

Glucagon like peptide 1 (GLP1)

Cat. # GLP16-P-500	Human GLP 1 amide (1-36)	**SIZE**: 500 ug
Cat. # GLP17-P-500	Human GLP 1 amide (7-36)	**SIZE**: 500 ug
Cat. # GLP18-P-500	Human Glucagon like peptide 1, (Ser8, 7-36) amide	**SIZE**: 500 ug

Glucagon is a member of a multigene family comprising of Secretin, Vasoactive Intestinal Peptide (VIP), Gastric Inhibitory Peptide (GIP) and others like Glicentin and Oxyntomodulin (OXM), which differs from glucagon by C-terminal octapeptide. The glucagon precursor contains at least 3 intervening sequences that divide the protein-coding portion into 4 regions corresponding to the signal peptide and part of the N-terminal peptide, the remainder of the N-terminal peptide and glucagon, glucagon-like peptide-1 (GLP1), and GLP2. The GLP 1 & 2 stimulates intestinal growth and up regulates villus height in the small intestine, concomitant with increased crupt cell proliferation and decreased enterocyte apoptosis. The two GLP's are mainly produced in the A cells of the Islets of Langerhans in response to a drop in blood sugar concentration.

GLP1, a processed active peptide of 30aa (chr 2q36-q37) is a potent insulin secretagogue, plays a major role in the enteroinsular axis, accounting for the finding that plasma insulin levels accompanying oral intake of glucose are greater than those observed when glucose is given intravenously. The so-called gluco-incretin.

GLP1 peptides were synthesized and purified by RP-HPLC.

Cat# GLP16-P-500 (GLP1, 1-36 aa)

Sequence:

H-His-Asp-Glu-Phe-Glu-Arg-His-Ala-Glu-Gly-Thr-Phe-Thr-Ser-Asp-Val-Ser-Ser-Tyr-Leu-Glu-Gly-Gln-Ala-Ala-Lys-Glu-Phe-Ile-Ala-Trp-Leu-Val-Lys-Gly-Arg-Gly-NH2

Mol Wt: 4169.6
Formula: C186H275N51O59
Disulfide bridge
Purity: >95%

Cat# GLP17-P-500 (GLP1, 7-36 aa)

Sequence:

H- His-Ala-Glu-Gly-Thr-Phe-Thr-Ser-Asp-Val-Ser-Ser-Tyr-Leu-Glu-Gly-Gln-Ala-Ala-Lys-Glu-Phe-Ile-Ala-Trp-Leu-Val-Lys-Gly-Arg-NH2

Mol Wt: 3297.5
Formula: C149H226N40O45
Disulfide bridge
Purity: >95%

Cat# GLP18-P-500 (Ser8, 7-36)

Sequence

His-Ser-Glu-Gly-Thr-Phe-Thr-Ser-Asp-Val-Ser-Ser-Tyr-Leu-Glu-Gly-Gln-Ala-Ala-Lys-Glu-Phe-Ile-Ala-Trp-Leu-Val-Lys-Gly-Arg-NH2

MW 3312.7
Formula C149H225N40O46
Disulfide Bridge

The modification of GLP-1 (7-36) by replacing alanine with serine significantly improved the plasma stability of GLP-1 (7-36) amide against DPP IV without impairing its insinotropic activity. This modified GLP-1 (7-36) amide could improve the potential of GLP-1 in the treatment of type-II diabetes

All peptides in soluble in DMF or other buffers.

Form & Storage of Antibodies/Peptide Control

Storage

Short-term: unopened, undiluted liquid vials at -20OC and powder at 4oC or -20oC..

Long-term: at –20C or below in suitable aliquots after reconstitution. Do not freeze and thaw and store working, diluted solutions.

Stability: 6-12 months at –20oC or below.
Shipping: 4oC for solutions and room temp for powder

General References:

Suzuki A et al, PNA (April 2003); Yamamot H et al, J Neurosci (2003) 23(7) 2939-46; Yves Rouille, JBC (1995) 270 : 26488-96,

*This product is for In vitro research use only.

Related material available from ADI

Antibodies for Glucagon, GIP, OXM, Secretin and GRF.

GLP16-17-18-P 71222A

India Contact:
Life Technologies (India) Pvt. Ltd.
306, Aggarwal City Mall, Opposite M2K Pitampura, Delhi – 110034 (INDIA). Ph: +91-11-42208000, 42208111, 42208222, Mobile: +91-9810521400, Fax: +91-11-42208444
Email: customerservice@lifetechindia.com Website: www.lifetechindia.com