

Product Specification Sheet

**Glucagon like peptide 2 (GLP2) peptides**

Cat. # GLP26-P-500	Human GLP2 peptide, 1-33 aa	<b>SIZE:</b> 500 ug
Cat. # GLP27-P-500	Rat GLP2 peptide, 1-33 aa	<b>SIZE:</b> 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 crypt 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.

**GLP2**, also a processed active peptide with 33aa, (chr 2q36-q37). GLP2 regulates gastric motility, gastric acid secretion, intestinal hexose transport, and increases the barrier function of the gut epithelium. It significantly enhances the surface area of the mucosal epithelium via stimulation of crypt cell proliferation. The actions of GLP2 are transduced by the GLP2 receptor, a G-protein-coupled receptor, activation of receptor signaling in heterologous cells promotes resistance to apoptotic injury in vitro, as such it may potentially be useful in treatment of injury and dysfunction of intestinal mucosal epithelium.

**Source of Antigen**

**Cat# GLP26-P-500 (Human GLP2, 1-33 aa)**

**Sequence:** His-Ala-Asp-Gly-Ser-Phe-Ser-Asp-Glu-Met-Asn-Thr-Ile-Leu-Asp-Asn-Leu-Ala-Ala-Arg-Asp-Phe-Ile-Asn-Trp-Leu-Ile-Gln-Thr-Lys-Ile-Thr-Asp

**Formula:** C165H254N44O55S1

**Mol Wt:** 3766.2

**Form:** White lyophilized powder

**CAS#:** [223460-79-5]

**Purity:** >95%

**Counter ion:** Trifluoroacetate

**Solubility:** 1 mg/ml in 5% NH4OH with water

**Store powder at -20oC.**

Prepare stock solution at 0.5-1 mg/ml and store at -20oC or below. Do not freeze and thaw.

**Cat# GLP27-P-500 (Rat GLP2, 1-33 aa)**

**Sequence:**

Sequence His-Ala-Asp-Gly-Ser-Phe-Ser-Asp-Glu-Met-Asn-Thr-Ile-Leu-Asp-Asn-Leu-Ala-Thr-Arg-Asp-Phe-Ile-Asn-Trp-Leu-Ile-Gln-Thr-Lys-Ile-Thr-Asp

**Formula:** C166H256N44O56S1

**Mol Wt:** 3796.2

**Form:** White lyophilized powder

**CAS#:** [223460-79-5]

**Purity:** >95%

**Counter ion:** Trifluoroacetate

**Solubility:** 1 mg/ml in 20% acetonitrile and 0.1% TFA

**Store powder at -20oC.**

Prepare stock solution at 0.5-1 mg/ml and store at -20oC or below. Do not freeze and thaw.

**Stability:** Powder, 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); Yamamoto H et al, J Neurosci (2003) 23(7) 2939-46; Yves Rouille, JBC (1995) 270 : 26488-96, Daniel, J. Drucker, (2001) Journal of Clinical Endocrinology and Metabolism, Vol. 86, No:4, 1759-1764.

\*This product is for In vitro research use only.

**Related material available from ADI**

Antibodies for GLP1, GLP2, GLP1 and 2 receptors

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

GLP26-GLP27-P-500

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