

---

**Product Data Sheet**

---

Product Name: Physalaemin

Cat. No.: GC31156

**Chemical Properties**

Cas. No. 2507-24-6

SMILES GLP-Ala-Asp-Pro-Asn-Lys-Phe-Tyr-Gly-Leu-Met-NH<sub>2</sub>Formula C<sub>58</sub>H<sub>84</sub>N<sub>14</sub>O<sub>16</sub>S M.Wt 1265.44

Solubility Soluble in DMSO Storage Store at -20°C

General tips For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT, or blue ice upon request.

Structure **Background**

Physalaemin, a non-mammalian tachykinin, binds selectively to neurokinin-1 (NK1) receptor with high affinity.

Physalaemin (PHY), an undecapeptide with the sequence pGlu-Ala-Asp-Pro-Asn-Lys-Phe-Tyr-Gly-Leu-Met-NH<sub>2</sub>, is a member of the tachykinin family of neuropeptides. PHY is very close to the mammalian tachykinin substance P (SP) in its function and chemical composition, and SP is well studied and characterized[1]. Physalaemin is a bradykinin potentiating peptide (BPP-5a)[2].

[1]. Grace CR, et al. Solution conformation of non-mammalian tachykinin physalaemin in lipid micelles by nuclear magnetic resonance. Biopolymers. 2011;96(3):252-9. [2].

Kobayashi J, Hydrolytic cleavage of pyroglutamyl-peptide bond. V. selective removal of pyroglutamic acid from biologically active pyroglutamylpeptides in high concentrations of aqueous methanesulfonic acid. Chem Pharm Bull (Tokyo). 2006 Jun;54(6):827-31.

**Caution: Product has not been fully validated for medical applications. For research use only.**

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA

---