

**Bombesin Protein**  
**A Ligand of Bombesin G-Protein Coupled Receptor**  
**Catalog # PG10012**

**Specification**

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**Bombesin Protein - Product Information**

**Bombesin Protein - Additional Information**

**Storage**  
-20°C

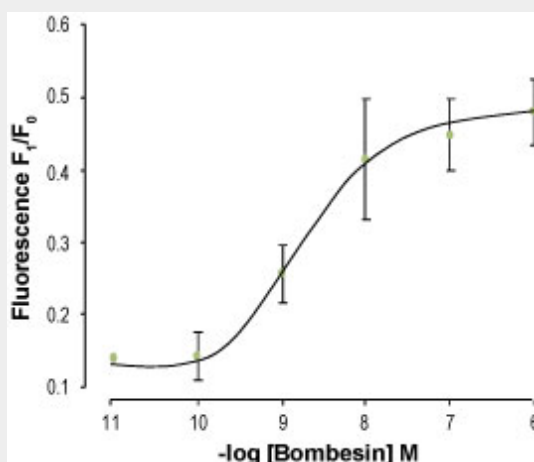
**Precautions**  
Bombesin Protein is for research use only and not for use in diagnostic or therapeutic procedures.

**Bombesin Protein - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**Bombesin Protein - Images**



Bombesin - Abgent Bombesin induces  $\text{Ca}^{2+}$  influx in 3T3-L1 cells. Cells were loaded with Fluo-3AM probe.  $\text{Ca}^{2+}$  influx was measured as a function of increasing Bombesin (#PG10012)

concentrations. The  $\text{Ca}^{2+}$  level is plotted against Bombesin concentrations ( $\text{ED}_{50} = 2.1 \text{ ng/ml}$ ).

### **Bombesin Protein - Background**

Bombesin is an active neuropeptide originally isolated from amphibian skin but also found in the central and peripheral nervous system of amphibians<sup>1</sup>. Later it was established that mammals and birds express two family groups of endogenous Bombesin-like factors, the gastrin-releasing peptides and neuromedin B2. The biological activities of bombesin are mediated through a family of three specific G-protein coupled receptors (GPCRs): BB1 which is also known as a neuromedin B receptor, BB2 also known as a gastrin-releasing peptide receptor and BB3 which is a low affinity binder for the Bombesin-like factors<sup>3,4</sup>. Bombesin and Bombesin-like factors show a broad range of biological activities such as regulation of smooth muscle contraction, stimulation of neuropeptide and hormone secretion, modulation of neural activity, growth regulation, and mediate anorexic effects in the hypothalamus<sup>5</sup>.

### **Bombesin Protein - References**

1 . Anastasi, A. (1971) Naunyn. Schmiedeberg's Arch. Pharmacol. 269,135. 2 . Battey, J. and Wada, E. (1991) Trends Neurosci. 14,524. 3 . Ohki-Hamazaki, H. et al. (2005) Int. J. Dev. Biol. 49,293. 4 . Wada E. et al. (1991) Neuron 6,421. 5 . Moody, T. W. and Merali, Z. (2004) Peptides 25,511.