# PRODUCT DATA SHEET



# Bioworld Technology CO., Ltd.

# GCS-β-1 (V21) Peptide

Cat No.: BS1158P

# **Background**

Guanylate cyclases belong to the adenylyl cyclase class-4/guanylyl cyclase family. There are two forms of guanylate cyclase, a soluble form (GCS or sGC), which act as receptors for nitric oxide and a membrane-bound receptor form (GC), which are peptide hormone receptors. The GC-C protein is composed of an extracellular domain, a single transmembrane domain, and a cytoplasmic region consisting of a kinase-like domain and a catalytic domain. It is expressed as two differentially glycosylated forms, a 130 kDa precursor form present in the endoplasmic reticulum and a 145 kDa form present on the plasma membrane. Ligand binding to the extracellular domain of GC-C promotes the accumulation of cGMP. GC-C acts as the receptor for heatstable enterotoxins, small peptides secreted by some pathogenic strains of E. coli that cause severe secretory diarrhea. GC-C also binds to guanylin and uroguanylin peptides, which modulate renal function in response to oral salt load.

#### **Swiss-Prot**

Q02153

## **Applications**

**Blocking** 

#### **Specificity**

This peptide can be used with studies using BS1158 GCS- $\beta$ -1 (V21) pAb.

# **Purification & Purity**

Synthetic peptide GCS- $\beta$ -1 (V21). (Note: the amino acid sequence is proprietary). The purity is > 98%.

#### **Product**

1 mg/ml in DI water.

### **Storage & Stability**

Store at  $4\,\mathrm{C}$  short term. Aliquot and store at -20  $\mathrm{C}$  long term. Avoid freeze-thaw cycles.

#### **Research Use**

For research use only, not for use in diagnostic procedure.