

## **GUCY2C Antibody (Center) Blocking Peptide**

Synthetic peptide Catalog # BP7136a

## **Specification**

**GUCY2C Antibody (Center) Blocking Peptide - Product Information** 

Primary Accession P25092

**GUCY2C Antibody (Center) Blocking Peptide - Additional Information** 

**Gene ID 2984** 

### **Other Names**

Heat-stable enterotoxin receptor, STA receptor, hSTAR, Guanylyl cyclase C, GC-C, Intestinal guanylate cyclase, GUCY2C, GUC2C, STAR

## **Target/Specificity**

The synthetic peptide sequence used to generate the antibody <a href=/product/pr oducts/AP7136a>AP7136a</a> was selected from the Center region of human GUCY2C. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

#### **Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

#### Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

#### **Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**GUCY2C Antibody (Center) Blocking Peptide** - **Protein Information** 

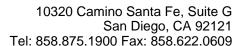
Name GUCY2C

## GUCY2C Antibody (Center) Blocking Peptide - Background

Guanylyl cyclase C (GC-C) is a transmembrane receptor expressed primarily in the intestine that regulates chloride secretion via the cystic fibrosis transmembrane conductance regulator. Binding of GC-C to either the endogenous peptide guanylin or the bacterially derived heat-stable enterotoxin STa, results in increased levels of cGMP and the stimulation of water and chloride secretion. In the case of exposure to STa, this leads to debilitating secretory diarrhea. GUCY2C is a receptor for STa, and is also activated by the endogenous peptide quanylin. The GUCY2C receptor has an extracellular ligand-binding domain and a cytoplasmic quanylyl cyclase domain, as do members of the natriuretic peptide receptor family.

# GUCY2C Antibody (Center) Blocking Peptide - References

Singh, R., J. Biol. Chem. 278(27):24342-24349 (2003).Tien, Y.W., et al., Clin. Cancer Res. 9(13):4891-4896 (2003).Sindice, A., et al., J. Biol. Chem. 277(20):17758-17764 (2002).Scott, R.O., et al., J. Biol. Chem. 277(25):22934-22941 (2002).Park, J., et al., Cancer Epidemiol. Biomarkers Prev. 11(8):739-744 (2002).





## Synonyms GUC2C, STAR

### **Function**

Receptor for the E.coli heat-stable enterotoxin (E.coli enterotoxin markedly stimulates the accumulation of cGMP in mammalian cells expressing GC-C). Also activated by the endogenous peptides guanylin and uroguanylin.

### **Cellular Location**

Cell membrane; Single-pass type I membrane protein Endoplasmic reticulum membrane; Single- pass type I membrane protein. Note=The 145 kDa plasma membrane form of GC-C contains sialic acid and galactose residues, while a differencially glycosylated 130 Kda form is a high mannose form that is resident in the endoplasmic reticulum and may serve as the precursor for the cell surface form

# **GUCY2C Antibody (Center) Blocking Peptide - Protocols**

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

• Blocking Peptides