

# Recombinant Protein Technical Manual Recombinant Human Grancalcin/GCA Protein (GST Tag) RPES5246

### **Product Data:**

**Product SKU:** RPES5246 **Size:** 10μg

Species: Human Expression host: E. coli

Uniprot: P28676

### **Protein Information:**

Molecular Mass: 50.3 kDa

AP Molecular Mass: 53 kDa

Tag: N-GST

**Bio-activity:** 

**Purity:** > 95 % as determined by reducing SDS-PAGE.

**Endotoxin:**  $< 1.0 \text{ EU per } \mu\text{g}$  as determined by the LAL method.

**Storage:** Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C.

Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of

reconstituted samples are stable at < -20°C for 3 months.

**Shipping:** This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from a 0.2 μm filtered solution of 20mM TrisHCl, 500mM Nacl, pH 8.5.

**Reconstitution:** Please refer to the printed manual for detailed information.

Application:

**Synonyms:** Grancalcin; GCA; GCL

# Immunogen Information:

Sequence: Met 1-lle217

# Background:

Grancalcin (GCA) is a member of the penta EF hand subfamily which includes sorcin, calpain and ALG2. Grancalcin is highly expressed bone marrow and also can detected in neutrophils and macrophages. Grancalcin interacts with L-plastin which known to have actin bundling activity. It indicates that Grancalcin may play an important role in the adhesion of neutrophils to fibronectin. Furthermore, Grancalcin localization is dependent upon calcium and magnesium. It associates with both the granule and membrane fractions, which suggested a role for grancalcin in granule-membrane fusion and degranulation.