

GDI1 Blocking Peptide (C-term) Synthetic peptide Catalog # BP20083b

### **Specification**

# **GDI1 Blocking Peptide (C-term) - Product Information**

Primary Accession Other Accession

<u>P31150</u> <u>P50398, P50396, O8HXX7, P21856,</u> <u>NP\_001484.1</u>

### **GDI1 Blocking Peptide (C-term) - Additional Information**

Gene ID 2664

**Other Names** Rab GDP dissociation inhibitor alpha, Rab GDI alpha, Guanosine diphosphate dissociation inhibitor 1, GDI-1, Oligophrenin-2, Protein XAP-4, GDI1, GDIL, OPHN2, RABGDIA, XAP4

Target/Specificity The synthetic peptide sequence is selected from aa 430-443 of HUMAN GDI1

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.

### **GDI1 Blocking Peptide (C-term) - Protein Information**

Name GDI1

Synonyms GDIL, OPHN2, RABGDIA, XAP4

Function

Regulates the GDP/GTP exchange reaction of most Rab proteins by inhibiting the dissociation of GDP from them, and the subsequent binding of GTP to them. Promotes the dissociation of GDP-bound Rab proteins from the membrane and inhibits their activation. Promotes the dissociation of RAB1A, RAB3A, RAB5A and RAB10 from membranes.

**Cellular Location** Cytoplasm. Golgi apparatus, trans-Golgi network

**Tissue Location** Brain; predominant in neural and sensory tissues.



# **GDI1 Blocking Peptide (C-term) - Protocols**

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

### <u>Blocking Peptides</u>

GDI1 Blocking Peptide (C-term) - Images

# GDI1 Blocking Peptide (C-term) - Background

GDP dissociation inhibitors are proteins that regulate the GDP-GTP exchange reaction of members of the rab family, small GTP-binding proteins of the ras superfamily, that are involved in vesicular trafficking of molecules between cellular organelles. GDIs slow the rate of dissociation of GDP from rab proteins and release GDP from membrane-bound rabs. GDI1 is expressed primarily in neural and sensory tissues. Mutations in GDI1 have been linked to X-linked nonspecific mental retardation.

# **GDI1 Blocking Peptide (C-term) - References**

Martins-de-Souza, D., et al. J Psychiatr Res 44(14):989-991(2010) Massignan, T., et al. Mol. Cell Proteomics 9(4):611-622(2010) Chen, Y., et al. Biochem. J. 422(2):229-235(2009) Zhang, K.J., et al. Yi Chuan 30(5):590-594(2008) Ewing, R.M., et al. Mol. Syst. Biol. 3, 89 (2007) :