

**GPSM2 Blocking Peptide (N-Term)**

Synthetic peptide

Catalog # BP21850a

**Specification**

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**GPSM2 Blocking Peptide (N-Term) - Product Information**

Primary Accession

[P81274](#)

Other Accession

[Q8VDU0](#)**GPSM2 Blocking Peptide (N-Term) - Additional Information****Gene ID** 29899**Other Names**

G-protein-signaling modulator 2, Mosaic protein LGN, GPSM2, LGN

**Target/Specificity**

The synthetic peptide sequence is selected from aa 133-143 of HUMAN GPSM2

**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.

**GPSM2 Blocking Peptide (N-Term) - Protein Information****Name** GPSM2**Synonyms** LGN**Function**

Plays an important role in mitotic spindle pole organization via its interaction with NUMA1 (PubMed: [11781568](http://www.uniprot.org/citations/11781568)), PubMed: [15632202](http://www.uniprot.org/citations/15632202), PubMed: [21816348](http://www.uniprot.org/citations/21816348)). Required for cortical dynein-dynactin complex recruitment during metaphase (PubMed: [22327364](http://www.uniprot.org/citations/22327364)). Plays a role in metaphase spindle orientation (PubMed: [22327364](http://www.uniprot.org/citations/22327364)). Also plays an important role in asymmetric cell divisions (PubMed: [21816348](http://www.uniprot.org/citations/21816348)). Has guanine nucleotide dissociation inhibitor (GDI) activity towards G(i) alpha proteins, such as GNAI1 and GNAI3, and thereby regulates their activity (By similarity).

**Cellular Location**

Cytoplasm. Cytoplasm, cell cortex. Cytoplasm, cytoskeleton, spindle pole. Lateral cell membrane. Note=Localizes in the cytoplasm during interphase and at cell cortex during metaphase (PubMed:11781568, PubMed:15632202, PubMed:22074847). Colocalizes with NUMA1 to mitotic spindle poles (PubMed:11781568, PubMed:21816348). Localized at the central and lateral cell cortex regions in a RanGTP-dependent manner (PubMed:22327364). In horizontally retinal progenitor dividing cells, localized to the lateral cortical region. In vertically retinal progenitor dividing cells, localized at the polar cortical region (By similarity). {ECO:0000250|UniProtKB:Q8VDU0, ECO:0000269|PubMed:11781568, ECO:0000269|PubMed:15632202, ECO:0000269|PubMed:21816348, ECO:0000269|PubMed:22074847, ECO:0000269|PubMed:22327364}

**Tissue Location**

Ubiquitously expressed.

**GPSM2 Blocking Peptide (N-Term) - Protocols**

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

- [Blocking Peptides](#)

**GPSM2 Blocking Peptide (N-Term) - Images****GPSM2 Blocking Peptide (N-Term) - Background**

Plays an important role in spindle pole orientation. Interacts and contributes to the functional activity of G(i) alpha proteins. Acts to stabilize the apical complex during neuroblast divisions.

**GPSM2 Blocking Peptide (N-Term) - References**

Mochizuki N.,et al.Gene 181:39-43(1996).  
Katagiri T.,et al.Submitted (JUL-2008) to the EMBL/GenBank/DDBJ databases.  
Gregory S.G.,et al.Nature 441:315-321(2006).  
Mural R.J.,et al.Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases.  
Puhl H.L. III,et al.Submitted (JUL-2002) to the EMBL/GenBank/DDBJ databases.