Recombinant GPSM2 protein (His tag)

Catalog Number	540133
Synonyms	Mosaic protein LGN
Species	Human
Expression System	E. coli
Accession	P81274
Molecular Weight	Predictes a molecular mass of 43.56 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 47 kDa band.

Product Information

Sequence Region	1-376
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>88%, by SDS-PAGE with Coomassie Brilliant Blue staining.
Endotoxin	Not tested.
Activity	Not tested.
Stability	Samples are stable for up to twelve months from date of receipt at -70℃
Protein Construction	DNA encoding 1-376 aa (P81274) were fused with 6His tag.

Storage & Handling

Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

Description	Recombinant Human G-protein-signaling modulator 2 (Mosaic protein LGN) fragment (amino acids 1-376) is a high-purity protein designed for structural and biochemical studies. This stable and soluble fragment enables researchers to investigate the critical roles of GPSM2 in mitotic spindle organization, asymmetric cell division, and G-protein signaling regulation. G-protein-signaling modulator 2 (GPSM2), also known as Mosaic protein LGN, plays essential roles in cell division and polarity. The full-length protein organizes mitotic spindle poles through interaction with NUMA1 and recruits cortical dynein-dynactin complexes during metaphase, contributing to proper spindle orientation. GPSM2 is particularly important for asymmetric cell divisions and functions as a guanine nucleotide dissociation inhibitor (GDI) for G(i) alpha proteins such as GNAI1 and GNAI3, thereby regulating their activity. The protein localizes to multiple cellular compartments including the cytoplasm during interphase, cell cortex during metaphase, mitotic spindle poles, and lateral cell membrane, with its distribution varying throughout the cell cycle and in different cell types.