

Recombinant Human OMGP/OMG Protein (aa 1-420, His Tag)

Catalog No. PKSH031717

Note: Centrifuge before opening to ensure complete recovery of vial contents.

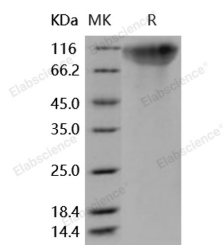
Description

Synonyms	OMGP
Species	Human
Expression Host	HEK293 Cells
Sequence	Met 1-Asn 420
Accession	P23515-1
Calculated Molecular Weight	46.0 kDa
Observed molecular weight	120-130 kDa
Tag	C-His
Bioactivity	Measured by the ability of the immobilized protein to support the adhesion of C6 Rat brain glial cells. Immobilized OMG (0.8 µg/ml, 100 µl/well) will mediate > 20% C6 cell adhesion.

Properties

Purity	> 97 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	Generally, 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 sterile PBS, pH 7.4 Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 97 % as determined by reducing SDS-PAGE.

Background

For Research Use Only

Oligodendrocyte-myelin glycoprotein; also known as OMG and OMGP; is a cell membrane protein which contains eight LRR (leucine-rich) repeats. OMG / OMGP is a glycosylphosphatidylinositol-anchored protein expressed by neurons and oligodendrocytes in the central nervous system (CNS). OMG / OMGP is a cell adhesion molecule contributing to the interactive process required for myelination in the central nervous system. OMG / OMGP play roles in both the developing and adult central nervous system. OMG / OMGP participates in growth cone collapse and inhibition of neurite outgrowth through its interaction with NgR; the receptor for Nogo. This function requires its leucine-rich repeat domain; a highly conserved region in OMgp during mammal evolution. OMG / OMGP leucine-rich repeat domain is also implicated in the inhibition of cell proliferation. OMG / OMGP may also be involved in the formation and maintenance of myelin sheaths. Cell proliferation; neuronal sprouting and myelination are crucial processes involved in brain development and regeneration after injury.