Recombinant Protein Technical Manual

Recombinant Human OLFM4 Protein (His Tag)

RPES0482

Product Data:

Product SKU: RPES0482

Size: 10µg

Species: Human

Expression host: HEK293 Cells

Uniprot: NP_006409.3

Protein Information:

Molecular Mass: 56.6 kDa

AP Molecular Mass:

Tag: C-His

Bio-activity:

Purity: > 92 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg of the protein 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℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ 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

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

Application:

Synonyms: Olfactomedin-4; OLM4; Antiapoptotic protein GW112; G-CSF-stimulated clone 1 protein; hGC; hOLfD; OLFM4; GW112

Immunogen Information:

Sequence: Met 1-Gln 510

Background:

Olfactomedin-4, also known as G-CSF-stimulated clone 1 protein, Antiapoptotic protein GW112, and OLFM4, is a secreted protein which contains one olfactomedin-like domain. The OLFM4 gene was recently reported to inhibit various apoptotic pathways and promote proliferation of cancer cells, suggesting that OLFM4 might serve as a diagnostic marker for human cancers. Thus, OLFM4 mRNA might be a useful tool to support the diagnosis of cancer, irrespective of the clinical stages. It is overexpressed in a number of human tumor types, especially in those of the digestive system. GW112 is associated with GRIM9, a protein known to be involved in regulating cellular apoptosis. Functionally, GW112 could significantly attenuate the ability of GRIM19 to mediate retinoic acid-IFN-beta-mediated cellular apoptosis and apoptosis-related gene expression. In addition, GW112 demonstrated strong antiapoptotic effects in tumor cells treated with other stress exposures such as hydrogen peroxide. Finally, forced overexpression of GW112 in murine prostate tumor cells led to more rapid tumor formation in a syngeneic host. OLFM4 is an important regulator of cell death that plays important roles in tumor cell survival and tumor growth. As a candidate gene for cancer-specific expression. The serum olfactomedin 4 (OLFM4) is a useful marker for Gastric cancer (GC) and its measurement alone or in combination with Reg IV has utility in the early detection of GC. GW112 has an antiapoptotic property against the cytotoxic agents-induced apoptosis. It suggested that GW112 could be an important mediator in NF kappaB-dependent tumorigenesis of digestive tract tissues.