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Recombinant Human OLFM4 Protein (His Tag)

Catalog Number: PKSH031049

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

Description

Species Human

Source HEK293 Cells-derived Human OLFM4 protein Met 1-Gln 510, with an C-terminal His

 Calculated MW
 56.6 kDa

 Accession
 NP 006409.3

Bio-activity Not validated for activity

Properties

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

Endotoxin $< 1.0 \text{ EU per } \mu\text{g}$ 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

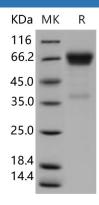
Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants

before lyophilization.

Please refer to the specific buffer information in the printed manual.

Reconstitution Please refer to the printed manual for detailed information.

Data



> 92 % as determined by reducing SDS-PAGE.

Background

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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 GRIM-19, 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. 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.

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