

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Olfactomedin-4/OLFM4 in direct ELISAs and Western blots.
Source	Monoclonal Mouse IgG ₁ Clone # 806305
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Chinese hamster ovary cell line CHO-derived recombinant human Olfactomedin-4/OLFM4 Asp21-Gln510 Accession # Q6UX06
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

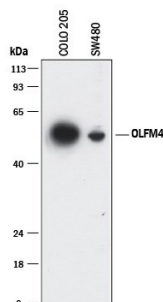
APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Western Blot	2 µg/mL	See Below
Immunocytochemistry	1-15 µg/mL	Immersion fixed Capan-1 human pancreatic adenocarcinoma cell line (Positive) and absent in U937 human histiocytic lymphoma cell line (Negative)

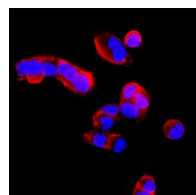
DATA

Western Blot

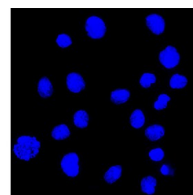


Detection of Human Olfactomedin-4/OLFM4 by Western Blot. Western blot shows lysates of COLO 205 human colorectal adenocarcinoma cell line and SW480 human colorectal adenocarcinoma cell line. PVDF membrane was probed with 2 µg/mL of Mouse Anti-Human Olfactomedin-4/OLFM4 Monoclonal Antibody (Catalog # MAB9218) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF018). A specific band was detected for Olfactomedin-4/OLFM4 at approximately 54 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

Immunocytochemistry



CAPAN-1 (Positive) cells



U937 (Negative) cells

Detection of Olfactomedin-4/OLFM4 in Capan-1 (Positive) and U937 (Negative). Olfactomedin-4/OLFM4 was detected in immersion fixed Capan-1 human pancreatic adenocarcinoma cell line (Positive) and absent in U937 human histiocytic lymphoma cell line (Negative) using Mouse Anti-Human Olfactomedin-4/OLFM4 Monoclonal Antibody (Catalog # MAB9218) at 1.7 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red; Catalog # NL007) and counterstained with DAPI (blue). Specific staining was localized to cell cytoplasm. View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> 12 months from date of receipt, -20 to -70 °C as supplied. 1 month, 2 to 8 °C under sterile conditions after reconstitution. 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Olfactomedin-4 (OLFM4), previously called GC-1 (G-CSF-stimulated clone-1), GW112 or hOlfD, is a 64 kDa secreted glycoprotein that is a member of the Olfactomedin/Noelin family of proteins. Mature Olfactomedin-4 is a 490 amino acid (aa) protein that is secreted mainly as multimers. Human Olfactomedin-4 is mainly expressed by gastrointestinal stem cells, developing granulocytes, type M4 acute myelogenous leukemias, and intestinal and prostate cancer cells and is upregulated by NF-κB signaling. It is reported to facilitate cell-cell adhesion by binding to lectins and cadherins, and to be anti-apoptotic. Mature human Olfactomedin-4 shares 71% aa sequence identity with mouse and rat Olfactomedin-4.