# Olfactorin (S-16): sc-83738



The Power to Question

#### **BACKGROUND**

Olfactorin, also known as UMODL1 (uromodulin-like 1), is a 1,318 amino acid single-pass type I membrane protein that localizes to both the cell membrane and the cytoplasm. Expressed as four tissue-specific isoforms (isoform 3 is present in testis, prostate and fetal thymus, while isoforms 4 is present in kidney and testis), Olfactorin is thought to play a role in the maturation of the olfactory system and may participate in developmental neurobiology events. Olfactorin contains several functional domains, including one ZP domain, one WAP domain, one EMI domain, two SEA domains, two fibronectin type-III domains and three EGF-like domains. Defects in the gene encoding Olfactorin may contribute to an increased susceptibility for high myopia, a degenerative condition that effects overall eye structure and vision.

## **REFERENCES**

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#### **CHROMOSOMAL LOCATION**

Genetic locus: UMODL1 (human) mapping to 21q22.3; Umodl1 (mouse) mapping to 17 A3.3.

## **SOURCE**

Olfactorin (S-16) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an extracellular domain of Olfactorin of human origin.

#### **PRODUCT**

Each vial contains 100  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-83738 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### **RESEARCH USE**

For research use only, not for use in diagnostic procedures.

#### **APPLICATIONS**

Olfactorin (S-16) is recommended for detection of Olfactorin of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Olfactorin (S-16) is also recommended for detection of Olfactorin in additional species, including equine, canine and bovine.

Suitable for use as control antibody for Olfactorin siRNA (h): sc-91416, Olfactorin siRNA (m): sc-150191, Olfactorin shRNA Plasmid (h): sc-91416-SH, Olfactorin shRNA Plasmid (m): sc-150191-SH, Olfactorin shRNA (h) Lentiviral Particles: sc-91416-V and Olfactorin shRNA (m) Lentiviral Particles: sc-150191-V.

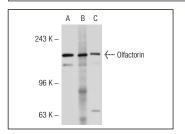
Molecular Weight of Olfactorin: 160 kDa.

Positive Controls: KNRK whole cell lysate: sc-2214, mouse testis extract: sc-2405 or mouse thymus extract: sc-2406.

### **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

# DATA



Olfactorin (S-16): sc-83738. Western blot analysis of Olfactorin expression in KNRK whole cell lysate (A) and mouse thymus (B) and mouse testis (C) tissue extracts.

# **STORAGE**

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

#### **PROTOCOLS**

See our web site at www.scbt.com or our catalog for detailed protocols and support products.