

# Olfactorin (D-15): sc-83737

## 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 (D-15) 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 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, ready P, (100 µg 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 (D-15) 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), 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 (D-15) is also recommended for detection of Olfactorin in additional species, including equine.

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) 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.

## 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](http://www.scbt.com) or our catalog for detailed protocols and support products.