

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Olfactomedin-2/Noelin-2 in direct ELISAs and Western blots. In direct ELISAs, approximately 10% cross-reactivity with recombinant mouse (rm) Olfactomedin-1 is observed and less than 5% cross-reactivity with recombinant hu
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	Chinese hamster ovary cell line CHO-derived recombinant human Olfactomedin-2/Noelin-2 Gln21-Pro454 Accession # O95897
Conjugate	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

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.

Western Blot Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.

Stability & Storage Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

Olfactomedin-2 (OLFM2, OM2), also called OlfC or neuronal olfactomedin-related endoplasmic reticulum-localized-2 (Noelin-2) is a 50 kDa (predicted), secreted member of the olfactomedin/noelin family of proteins (1-3). Since Noelin-2 has also been used to designate an alternately spliced form of Noelin-1, Olfactomedin-2 is the less ambiguous name (4). Olfactomedin domain-containing proteins are often found in neural tissues (3). Human Olfactomedin-2 expressed sequence tags have mainly been found in the brain and eye, and RNA in the cerebellum (1, 2). In zebrafish, Olfactomedin-2 expression is developmentally regulated and, like Noelin-1, may play a role in neural crest cell differentiation (5). The human Olfactomedin-2 cDNA encodes a 20 amino acid (aa) signal sequence and a 454 mature protein that contains two coiled-coil regions (aa 58-85 and 136-193) and an Olfactomedin domain (aa 194-446). Mature human Olfactomedin-2 shares 98% aa identity with rat, bovine and equine, 97% with mouse and canine, 81% with *Xenopus*, and 77% with zebrafish Olfactomedin-2. No alternate splice variants have been reported for Olfactomedin-2 (1). Polymorphisms of human Olfactomedin-2, with or without additional polymorphisms in optineurin (OPTN), have been associated with a small fraction of high intraocular pressure or open-angle glaucoma cases in Japanese patients (6). The family member myocilin shows stronger association with these ocular disorders, and either myocilin or Noelin-1 might heterodimerize with Olfactomedin-2 (1). Evidence suggests that Olfactomedin-2 has evolved from Noelin-1 gene duplication, and myocilin from Olfactomedin-2 gene duplication (1).

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