

## DESCRIPTION

|                                                                                                                                                                                                         |                                                                                                              |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b>                                                                                                                                                                               | Human                                                                                                        |
| <b>Specificity</b>                                                                                                                                                                                      | Detects human Otolin-1 in ELISAs and Western blots.                                                          |
| <b>Source</b>                                                                                                                                                                                           | Monoclonal Mouse IgG <sub>1</sub> Clone # 839418                                                             |
| <b>Purification</b>                                                                                                                                                                                     | Protein A or G purified from hybridoma culture supernatant                                                   |
| <b>Immunogen</b>                                                                                                                                                                                        | Chinese hamster ovary cell line CHO-derived recombinant human Otolin-1<br>Lys24-Pro477<br>Accession # A6NHN0 |
| <b>Conjugate</b>                                                                                                                                                                                        | Alexa Fluor 647<br>Excitation Wavelength: 650 nm<br>Emission Wavelength: 668 nm                              |
| <b>Formulation</b>                                                                                                                                                                                      | 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.

|                            |                                                                        |
|----------------------------|------------------------------------------------------------------------|
| <b>Western Blot</b>        | Optimal dilution of this antibody should be experimentally determined. |
| <b>Immunocytochemistry</b> | Optimal dilution of this antibody should be experimentally determined. |

## PREPARATION AND STORAGE

|                                |                                                                                                                   |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------|
| <b>Shipping</b>                | The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below. |
| <b>Stability &amp; Storage</b> | Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied                          |

## BACKGROUND

Otolin (OTOL1), also known as C1qTNF15, is an approximately 65 kDa protein found in the otoconial membrane lining the cochlea and vestibular labyrinth of the inner ear. It is secreted by supporting cells of the sensory epithelium. The otoconial membrane contains particles known as otoconia which are composed of glycoproteins and proteoglycans coated with calcium carbonate crystals. Otolin is one of the protein components of otoconia particles, and it is important for otoconia formation as well as for auditory and vestibular function. It associates into multimers and disulfide-linked oligomers and also associates with other otoconial proteins including Cerebellin-1 and Otoconin-90. Otolin contains three collagen-like regions followed by a C1q-like domain at the C-terminus. It is extensively glycosylated and has multiple hydroxylated proline residues in the collagenous regions. Human Otolin shares 72% aa sequence identity with mouse and rat Otolin.

## PRODUCT SPECIFIC NOTICES

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