

#### DESCRIPTION

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| <b>Species Reactivity</b>                                                                                                                                                                               | Human                                                                                                                   |
| <b>Specificity</b>                                                                                                                                                                                      | Detects human Nicastrin Isoform 1 in direct ELISAs and Western blots.                                                   |
| <b>Source</b>                                                                                                                                                                                           | Polyclonal Sheep IgG                                                                                                    |
| <b>Purification</b>                                                                                                                                                                                     | Antigen Affinity-purified                                                                                               |
| <b>Immunogen</b>                                                                                                                                                                                        | Chinese hamster ovary cell line CHO-derived recombinant human Nicastrin Isoform 1<br>Asn34-Glu669<br>Accession # Q92542 |
| <b>Conjugate</b>                                                                                                                                                                                        | Alexa Fluor 350<br>Excitation Wavelength: 346 nm<br>Emission Wavelength: 442 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>Immunohistochemistry</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

Nicastrin (NCT) is a 150-160 kDa member of the nicastrin family of proteins. It is a component of the aspartyl protease γ-secretase complex and serves to stabilize and direct γ-secretase components to proper positions in the plasma membrane. The γ-secretase complex mediates the cleavage of intramembrane proteins such as notch-1 and APP. Mature human nicastrin is a 676 amino acid type I transmembrane glycoprotein. It contains a 636 aa extracellular domain (aa 34-669) that shows a 58 aa sequence (aa 312-369) which interacts with γ-secretase substrates. There are multiple splice variants of NCT. One shows a deletion of aa 195-322 and 394-709, a second shows a 29 aa substitution for the C-terminal 604 aa and a third shows a deletion of aa 200-709 accompanied by an insertion of 33 aa after Leu30. Over aa 34-669, human NCT shares 90% aa identity with mouse NCT.

#### PRODUCT SPECIFIC NOTICES

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