

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Nicastrin in direct ELISAs and Western blots.
Source	Monoclonal Mouse IgG ₁ Clone # 716910
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Chinese hamster ovary cell line CHO-derived recombinant human Nicastrin Asn34-Glu669 Accession # Q92542
Conjugate	Alexa Fluor 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 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

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.

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