

DESCRIPTION

Species Reactivity	Human/Mouse/Rat
Specificity	Detects human, mouse, and rat Nicalin in Western blots.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>S. frugiperda</i> insect ovarian cell line Sf 21-derived recombinant human Nicalin Met1-Ala522, predicted Accession # Q969V3
Conjugate	Alexa Fluor 594 Excitation Wavelength: 590 nm Emission Wavelength: 617 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

Nicalin (NICAstrin-Like protein) is a 60-62 kDa member of the nicastrin family of proteins. It is an ER-embedded transmembrane protein that is found in skeletal and cardiac muscle, hepatocytes and neurons. Nicalin interacts with 22 kDa TMEM147 and 130 kDa NMO1 to form a 200-220 kDa complex that antagonizes Nodal signaling. Mature human nicalin is a 521 amino acid (aa) type I transmembrane glycoprotein. It contains a 480 aa luminal/extracellular region (aa 43-522) plus a 20 aa cytoplasmic domain (aa 544-563). The luminal region possesses one likely inactive M28 Zn-peptidase-like domain (aa 130-429). Four potential isoform variants are reported. One shows an alternative start site at Met75, a second contains a seven aa insertion after Gln543, a third contains a 102 aa substitution for aa 162-563, and a fourth shows a deletion of Gln446. Over aa 1-522, human nicalin shares 95% aa sequence identity with mouse nicalin.

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