

DESCRIPTION

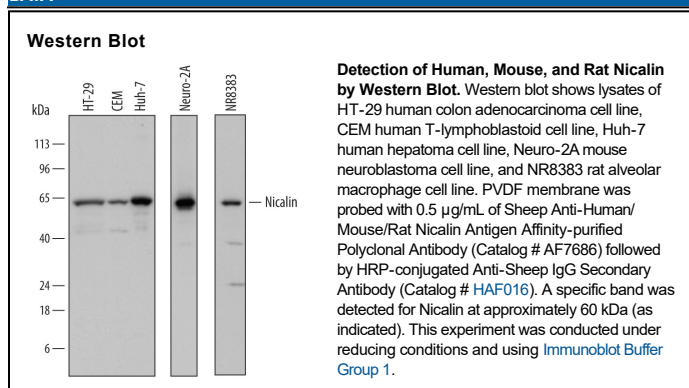
Species Reactivity	Human/Mouse/Rat
Specificity	Detects human, mouse, and rat Nicalin in Western blots.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>S. frugiperda</i> insect ovarian cell line Sf 21-derived recombinant human Nicalin Met1-Ala522, predicted Accession # Q969V3
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

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.

	Recommended Concentration	Sample
Western Blot	0.5 µg/mL	See Below

DATA



PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.2 mg/mL.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> 12 months from date of receipt, -20 to -70 °C as supplied. 1 month, 2 to 8 °C under sterile conditions after reconstitution. 6 months, -20 to -70 °C under sterile conditions after reconstitution.

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 NOMO1 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.