

Anti-Neurocan Picoband Antibody

Catalog # ABO13055

Specification

Anti-Neurocan Picoband Antibody - Product Information

Application WB, IHC-P
Primary Accession NCAN: 014594

Host Reactivity Rabbit Human, Mouse, Rat

Clonality Polyclonal Lyophilized

Description

Rabbit IgG polyclonal antibody for Neurocan detection. Tested with WB, IHC-P in Human; Mouse; Rat.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-Neurocan Picoband Antibody - Additional Information

Application Details

Western blot, 0.1-0.5 μ g/ml
br> Immunohistochemistry(Paraffin-embedded Section), 0.5-1 μ g/ml
br>

Subcellular Localization

Secreted.

Tissue Specificity

Brain.

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen

A synthetic peptide corresponding to a sequence of human Neurocan (HENTWIGLNDRIVERDFQWTDNTGLQFENWRENQPDNFFA).

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins.

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.



Anti-Neurocan Picoband Antibody - Protein Information

Anti-Neurocan Picoband Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-Neurocan Picoband Antibody - Images

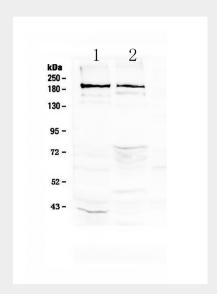


Figure 1. Western blot analysis of Neurocan using anti-Neurocan antibody (ABO13055). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: rat brain tissue lysates, Lane 2: rat testis tissue lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-Neurocan antigen affinity purified polyclonal antibody (Catalog # ABO13055) at 0.5 ug/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for Neurocan at approximately 200KD. The expected band size for Neurocan is at 143KD.



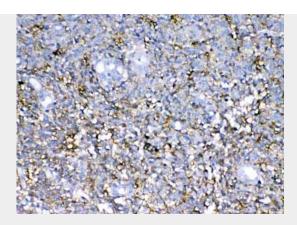


Figure 2. IHC analysis of Neurocan using anti-Neurocan antibody (ABO13055). Neurocan was detected in paraffin-embedded section of human glioma tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-Neurocan Antibody (ABO13055) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.

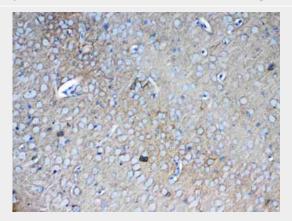


Figure 3. IHC analysis of Neurocan using anti-Neurocan antibody (ABO13055). Neurocan was detected in paraffin-embedded section of mouse brain tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-Neurocan Antibody (ABO13055) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.

Anti-Neurocan Picoband Antibody - Background

Neurocan core protein is a protein that in humans is encoded by the NCAN gene. Neurocan is a member of the lectican / chondroitin sulfate proteoglycan protein families and consists of neurocan core protein and chondroitin sulfate. It is thought to be involved in the modulation of cell adhesion and migration. In the human subjects, it was found that NCAN genotype was strongly associated with manic symptoms but not with depressive symptoms. In the mice, the absence of functional Neurocan resulted in a variety of manic-like behaviors, which could be normalized by administering lithium.