

# Anti-Neurocan Picoband Antibody

Catalog # ABO13055

## Product Information

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|--------------------------|--------------------------------------------------------------------------------------------------|
| <b>Application</b>       | WB, IHC-P                                                                                        |
| <b>Primary Accession</b> | <a href="#">NCAN: 014594</a>                                                                     |
| <b>Host</b>              | Rabbit                                                                                           |
| <b>Reactivity</b>        | Human, Mouse, Rat                                                                                |
| <b>Clonality</b>         | Polyclonal                                                                                       |
| <b>Format</b>            | Lyophilized                                                                                      |
| <b>Description</b>       | Rabbit IgG polyclonal antibody for Neurocan detection. Tested with WB, IHC-P in Human;Mouse;Rat. |
| <b>Reconstitution</b>    | Add 0.2ml of distilled water will yield a concentration of 500ug/ml.                             |

## Additional Information

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| <b>Application Details</b>      | Western blot, 0.1-0.5 µg/ml<br>Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml                                                                                        |
| <b>Subcellular Localization</b> | Secreted .                                                                                                                                                                         |
| <b>Tissue Specificity</b>       | Brain.                                                                                                                                                                             |
| <b>Contents</b>                 | Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na <sub>2</sub> HPO <sub>4</sub> , 0.05mg NaN <sub>3</sub> .                                                                         |
| <b>Immunogen</b>                | A synthetic peptide corresponding to a sequence of human Neurocan (HENTWIGLNDRIVERDFQWTDNTGLQFENWRENQPDNFFA).                                                                      |
| <b>Purification</b>             | Immunogen affinity purified.                                                                                                                                                       |
| <b>Cross Reactivity</b>         | No cross reactivity with other proteins.                                                                                                                                           |
| <b>Storage</b>                  | At -20 °C for one year. After reconstitution, 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. |

## Protein Information

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### Background

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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.

## Images

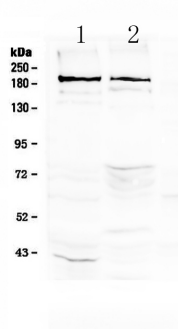


Figure 1. Western blot analysis of Neurocan using anti-Neurocan antibody (ABO13055). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: rat brain 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.

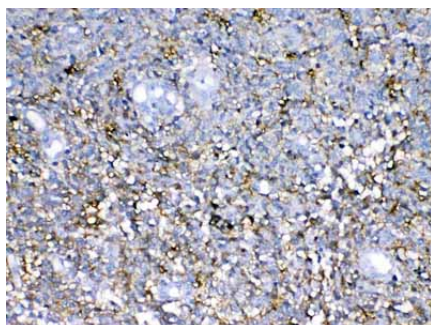


Figure 2. IHC analysis of Neurocan using anti-Neurocan antibody (ABO13055). Neurocan was detected in paraffin-embedded section of human glioma tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% 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 Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.

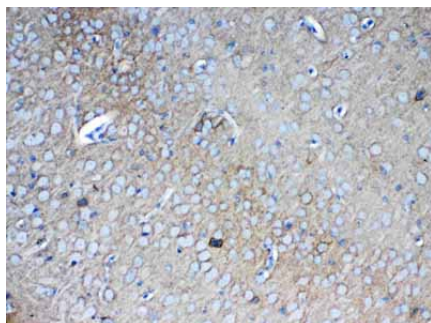


Figure 3. IHC analysis of Neurocan using anti-Neurocan antibody (ABO13055). Neurocan was detected in paraffin-embedded section of mouse brain tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% 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 Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.