

For Research Use Only

# NECAB2 Recombinant monoclonal antibody

Catalog Number: 88290-1-RR



## Basic Information

|                                                                |                                                                   |                                                       |
|----------------------------------------------------------------|-------------------------------------------------------------------|-------------------------------------------------------|
| <b>Catalog Number:</b><br>88290-1-RR                           | <b>GenBank Accession Number:</b><br>BC016979                      | <b>Purification Method:</b><br>Protein A purification |
| <b>Size:</b><br>100ul , Concentration: 1000 µg/ml by Nanodrop; | <b>GeneID (NCBI):</b><br>54550                                    | <b>CloneNo.:</b><br>260727H8                          |
| <b>Source:</b><br>Rabbit                                       | <b>UNIPROT ID:</b><br>Q7Z6G3                                      | <b>Recommended Dilutions:</b><br>WB: 1:500-1:2000     |
| <b>Isotype:</b><br>IgG                                         | <b>Full Name:</b><br>N-terminal EF-hand calcium binding protein 2 |                                                       |
| <b>Immunogen Catalog Number:</b><br>AG2909                     | <b>Calculated MW:</b><br>386 aa, 42 kDa                           |                                                       |
|                                                                | <b>Observed MW:</b><br>37 kDa                                     |                                                       |

## Applications

|                                                  |                                                                        |
|--------------------------------------------------|------------------------------------------------------------------------|
| <b>Tested Applications:</b><br>WB, ELISA         | <b>Positive Controls:</b><br>WB : mouse brain tissue, rat brain tissue |
| <b>Species Specificity:</b><br>human, mouse, rat |                                                                        |

## Background Information

NECAB2 (N-terminal EF-hand calcium-binding protein 2) is a neuronal calcium sensor that functions as a signaling scaffold to modulate G protein-coupled receptor activity. It binds calcium via its N-terminal EF-hand domain and interacts directly with the adenosine A2A receptor (ADORA2A) and metabotropic glutamate receptor 5 (mGluR5), regulating their cell surface expression, internalization, and downstream signaling such as ERK1/2 activation. The protein is predominantly expressed in the brain and spinal cord, where it plays a critical role in pain signaling; its loss in dorsal root ganglia and spinal interneurons significantly accelerates recovery from inflammatory pain hypersensitivity in mice.

## Storage

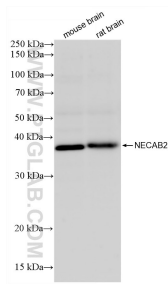
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol, pH7.3  
**Aliquoting is unnecessary for -20°C storage**

\*\*\* 20ul sizes contain 0.1% BSA

For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
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## Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 88290-1-RR (NECAB2 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.