Synaptic Systems

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CNIH 3

Cat.No. 253 303; Polyclonal rabbit antibody, 50 µg specific antibody (lyophilized)

Data Sheet

Reconstitution/ Storage	50 µg specific antibody, lyophilized. Affinity purified with the immunogen. Rabbit serum albumin was added for stabilization. For reconstitution add 50 µl H_2O to get a 1mg/ml solution in PBS. Then aliquot and store at -20°C until use.
Applications	**WB**: 1 : 1000 (AP staining) **IP**: not tested yet **ICC**: not tested yet **IHC**: not tested yet **IHC-P/FFPE**: not tested yet
Immunogen	Synthetic peptide corresponding to AA 128 to 140 from mouse CNIH3 (UniProt Id: Q6ZWS4)
Reactivity	Reacts with: rat (D0Q0Y7), mouse (Q6ZWS4). Other species not tested yet.
Specificity	Specific for CNIH 3; recognizes isoforms 1 and 2.

TO BE USED IN VITRO / FOR RESEARCH ONLY
NOT TOXIC, NOT HAZARDOUS, NOT INFECTIOUS, NOT CONTAGIOUS

Ligand gated cation channels of the AMPA/GLuA subtype interact with a family of proteins termed transmembrane AMPA-receptor regulatory proteins (TARPs). These proteins regulate the surface expression and the biophysical properties of GluAs.
A second protein family of 4 members referred to as **c**or**nich**o**n** 1-4 or **CNIH** 1-4 has been attributed similar properties in mammals. However it is still under discussion whether these proteins serve as chaperones, involved in the trafficking of EGFR ligands from the ER to Golgi like their homologes in yeast and Drosophila, or as GluA auxilliary subunits. For **CNIH 3** three isoforms have been described.

Selected General References

Cornichon-2 modulates AMPA receptor-transmembrane AMPA receptor regulatory protein assembly to dictate gating and pharmacology.
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Kato AS, Gill MB, Ho MT, Yu H, Tu Y, Siuda ER, Wang H, Qian YW, Nisenbaum ES, Tomita S, Bredt DS, et al.
Neuron (2010) 68(6): 1082-96.

Functional comparison of the effects of TARPs and cornichons on AMPA receptor trafficking and gating.
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