Synaptic Systems

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CNIH 2

Cat.No. 253-2P; control peptide, 100 µg peptide (lyophilized)

Data Sheet

Reconstitution/ Storage	100 µg peptide, lyophilized. For reconstitution add 100 µl H_2O to get a 1mg/ml solution in PBS. Then aliquot and store at -20°C until use. Control peptides should also be stored at -20°C when still lyophilized!
Immunogen	Synthetic peptide corresponding to AA 107 to 121 from mouse CNIH2 (UniProt Id: O35089)
Recommended dilution	Optimal concentrations should be determined by the end-user.
matching antibodies	253 203
Remarks	This control peptide consists of the synthetic peptide (aa 107-121 of mouse CNIH 2) that has been used for immunization. It has been tested in preadsorption experiments and blocks efficiently and specifically the corresponding signal in Western blots. The amount of peptide needed for efficient blocking depends on the titer and on the affinity of the antibody to the antigen.

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