Synaptic Systems

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α-Protocadherin

Cat.No. 190 003; 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 : 500 up to 1 : 1000 (AP staining) **IP**: not tested yet **ICC**: 1 : 500 **IHC**: 1 : 500 **IHC-P/FFPE**: not tested yet
Immunogen	Recombinant protein corresponding to AA 797 to 948 from mouse α-Protocadherin (UniProt Id: O88689)
Reactivity	Reacts with: human, rat, mouse. Other species not tested yet.
Specificity	Detects all α-protocadherins since they share the constant cytoplasmic tail. (K.O. verified)

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

Cadherins are a complex protein superfamily involved in many cellular processes including cell recognition, cell signaling, cell communication during embryogenesis, and the formation of neural circuits in the central nervous system. **Protocadherins** constitute the largest group within the cadherin superfamily and can be subdivided into three groups: **α**-, β- and **γ**-protocadherins. Genes for these subgroups are organized in closely related gene clusters and encode variable extracellular and transmembrane domains. The short cytosolic tails are constant and shared within one subgroup.

Selected References SYSY Antibodies

Combinatorial effects of Alpha- and Gamma-Protocadherins on neuronal survival and dendritic self-avoidance.
Ing-Esteves S, Kostadinov D, Marocha J, Sing AD, Joseph KS, Laboulaye M, Sanes JR, Lefebvre JL
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Selected General References

Combinatorial expression of alpha- and gamma-protocadherins alters their presenilin-dependent processing.
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Molecular and cellular biology (2007) 27(11): 4121-32.

Gamma protocadherin expression in the embryonic chick nervous system.
Cronin KD, Capehart AA
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Cytoplasmic domain of protocadherin-alpha enhances homophilic interactions and recognizes cytoskeletal elements.
Triana-Baltzer GB, Blank M
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Molecular evolution of cadherin-related neuronal receptor/protocadherin(alpha) (CNR/Pcdh(alpha)) gene cluster in Mus musculus subspecies.
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Molecular biology and evolution (2005) 22(6): 1433-43.

Molecular mechanisms governing Pcdh-gamma gene expression: evidence for a multiple promoter and cis-alternative splicing model.
Wang X, Su H, Bradley A
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