

α -Protocadherin

Cat.No. 190 002; Polyclonal rabbit antibody, 200 μ l antiserum (lyophilized)

Data Sheet

Reconstitution/ Storage	200 μ l antiserum, lyophilized. For reconstitution add 200 μ l H ₂ O, then aliquot and store at -20°C until use.
Applications	WB: 1 : 500 up to 1 : 1000 (AP staining) IP: not tested yet ICC: not recommended (see remarks) IHC: not tested yet 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.
Remarks	ICC: cat. no. 190 003 is recommended

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 General References

- Combinatorial expression of alpha- and gamma-protocadherins alters their presenilin-dependent processing.
Bonn S, Seeburg PH, Schwarz MK
Molecular and cellular biology (2007) 27(11): 4121-32.
- Gamma protocadherin expression in the embryonic chick nervous system.
Cronin KD, Capehart AA
International journal of biological sciences (2006) 3(1): 8-11.
- Cytoplasmic domain of protocadherin-alpha enhances homophilic interactions and recognizes cytoskeletal elements.
Triana-Baltzer GB, Blank M
Journal of neurobiology (2006) 66(4): 393-407.
- Molecular evolution of cadherin-related neuronal receptor/protocadherin(alpha) (CNR/Pcdh(alpha)) gene cluster in Mus musculus subspecies.
Taguchi Y, Koide T, Shiroishi T, Yagi T
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
Genes & development (2002) 16(15): 1890-905.
- Protocadherin Pcdh2 shows properties similar to, but distinct from, those of classical cadherins.
Obata S, Sago H, Mori N, Rochelle JM, Seldin MF, Davidson M, St John T, Taketani S, Suzuki ST
Journal of cell science (1995) 108 (Pt 12): 3765-73.