

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Protocadherin-1 in direct ELISAs and Western blots. In direct ELISAs, less than 1% cross-reactivity with recombinant human (rh) Protocadherin-8 and rhProtocadherin-10 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human Protocadherin-1 Thr58-Asn162 Accession # Q08174
Conjugate	Alexa Fluor 647 Excitation Wavelength: 650 nm Emission Wavelength: 668 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

Western Blot	Optimal dilution of this antibody should be experimentally determined.
Immunocytochemistry	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

Protocadherin-1 (PCDH-1; also PC42) is a 150 - 170 kDa δ1 subgroup member of the nonclustered protocadherin family of molecules. It is expressed on macrophages, respiratory epithelium, endothelial cells and neurons. Protocadherin-1 apparently forms homophilic Ca⁺⁺-dependent complexes and likely serves as an adhesion molecule. Human full-length Protocadherin-1 precursor is 1237 amino acids (aa) in length. It is a type I transmembrane glycoprotein that contains a 795 aa extracellular domain (ECD) (aa 58 - 852) plus a 364 aa cytoplasmic region. There are seven cadherin domains in the ECD (aa 58 - 844), and an RRVTF cytoplasmic motif that binds PP1α phosphatase. There are multiple splice variants. Alternative start sites exist at Met23 and Met235, there is a deletion of aa 209 - 220, and a 27 aa substitution for aa 1034 - 1237. Over aa 58 - 162, human Protocadherin-1 shares 96% aa identity with mouse Protocadherin-1.

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