Mouse Protocadherin-12 Alexa Fluor® 488-conjugated Antibody

Monoclonal Rat IgG_{2A} Clone # 868909

Catalog Number: FAB7926G

100 µg

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse Protocadherin-12 in ELISA.
Source	Monoclonal Rat IgG_{2A} Clone # 868909
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse Protocadherin-12 Met1-Ala716 Accession # O55134
Conjugate	Alexa Fluor 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 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.
Immunohistochemistry	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

PCDH12 (Protocadherin 12; also VE-Cadherin 2) is a 150-160 kDa glycoprotein member of the PCDH family of molecules. It exhibits limited expression, being found on endothelial cells, renal mesangium, Sertoli cells, and glycogen-positive trophoblast cells. PCDH is a transmembrane protein that forms homotypic aggregates in a calcium-dependent manner. Although this would suggest a prominent role in cell-cell adhesion, it is unclear if this is the only activity for the molecule. In any case, it appears that PCDH12 does play an important role in placental development. Mature mouse PCDH12 is an 1163 amino acid (aa) type I transmembrane protein (aa 18-1180). It possesses a 699 aa extracellular region (aa 18-716) that contains six cadherin domains (aa 28-711), plus a 21 aa transmembrane segment coupled to a lengthy 443 aa cytoplasmic domain (aa 738-1180). Based on human, mouse PCDH12 will undergo proteolytic processing. MMP activity will first generate a 90 kDa circulating extracellular fragment and a 60 kDa membrane-bound fragment, followed by γ-secretase which has the potential to further act on the membrane-bound fragment, generating a cytosolic 50 kDa fragment. There is one potential alternative start site at Met1060. Over aa 18-716, mouse PCDH12 shares 95% and 82% aa sequence identity with rat and human PCDH12, respectively.

PRODUCT SPECIFIC NOTICES

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