

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse Cadherin-4/R-Cadherin in direct ELISAs and Western blots. In direct ELISAs, approximately 5% cross-reactivity with recombinant human Cadherin-4/R-Cadherin and recombinant mouse (rm) Cadherin-2 is observed and less than 1% cross-reactivity with
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse Cadherin-4/R-Cadherin His21-Ala731 Accession # P39038
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.
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

Cadherin-4 (also Retinal/R-Cadherin) is a 120 kDa (100 kDa predicted) member of the classical cadherin family of molecules. It is expressed on mammary epithelium, olfactory bulb neurons, cerebellar granule cells, vascular smooth muscle, astrocytes and pancreatic β -cells. Cadherin-4 forms both homodimers and heterodimers with N-cadherin. These complexes will oligomerize, providing sources for adhesion and migration. Cadherin-4 also binds to KLRG1 expressed on NK, T and Treg lymphocytes. Mouse cadherin-4 precursor is 893 amino acids (aa) in length. It contains a 146 aa propeptide (aa 21-166) coupled to a 746 amino acid (aa) type I transmembrane mature protein (aa 167-913). The mature region possesses a 565 aa extracellular domain (aa 167-731) plus a 160 aa cytoplasmic region (aa 753-913). Consistent with classical cadherins, cadherin-4 contains five cadherin repeats in the extracellular domain (aa 167-721). There is one potential splice form that shows a 44 aa substitution for aa 291-913. Over aa 21-731, mouse cadherin-4 shares 98% and 93% aa identity with rat and human cadherin-4, respectively.

PRODUCT SPECIFIC NOTICES

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc., and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.