

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Protogenin in direct ELISAs.
Source	Monoclonal Mouse IgG ₁ Clone # 814403
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant human Protogenin Phe36-Ala952 Accession # Q2VWP7
Conjugate	Alexa Fluor 700 Excitation Wavelength: 675-700 nm Emission Wavelength: 723 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.

Neutralization 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

PRTG (Protogenin; also Protein Shen-Dan) is a 175-180 kDa transmembrane (TM) member of the DEAL (DCC *et al*) family of proteins. It is expressed in the embryo in the period before E10.5 in mouse (day 28 in human), and appears in a widespread distribution. Through homophilic intercellular interaction, it regulates initial epiblast cell migration/ingression, thus impacting somite organization. Via its actions as a neural tube epithelial cell receptor, it binds soluble 60 kDa ERdj3, resulting in a suppression of neuron differentiation. Mature human PRTG is an 1115 amino acid (aa) type I TM glycoprotein. It contains a 917 aa extracellular domain (ECD) (aa 36-952) and a 180 aa cytoplasmic region. The ECD possesses four consecutive Ig-like domains (aa 36-411) followed by five FN type III domains (aa 419-914). There is one potential splice variant that shows a 49 aa substitution for Ala325 coupled to a deletion of aa 516-541. The ECD of human PRTG shares 93% aa identity with the ECD of mouse PRTG.

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.