

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 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 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.

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