

## DESCRIPTION

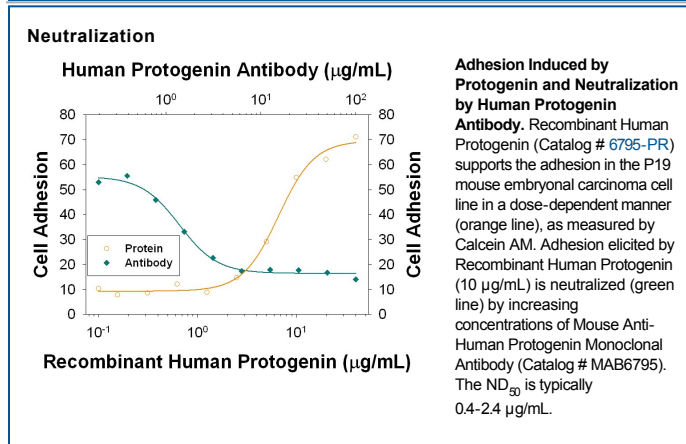
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human Protogenin in direct ELISAs.
<b>Source</b>	Monoclonal Mouse IgG <sub>1</sub> Clone # 814403
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant human Protogenin Phe36-Ala952 Accession # Q2VWP7
<b>Endotoxin Level</b>	<0.10 EU per 1 µg of the antibody by the LAL method.
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

## 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** Measured by its ability to neutralize Protogenin-induced adhesion in the P19 mouse embryonal carcinoma cell line. The Neutralization Dose (ND<sub>50</sub>) is typically 0.4-2.4 µg/mL in the presence of 10 µg/mL Recombinant Human Protogenin.

## DATA



## PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.5 mg/mL in sterile PBS.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>● 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

## 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.