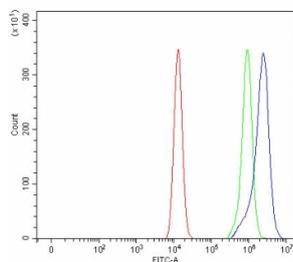


PRRG1 Antibody / TMG1 (RQ8024)

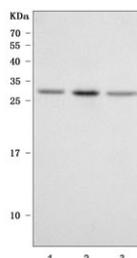
Catalog No.	Formulation	Size
RQ8024	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

[Bulk quote request](#)

Availability	1-3 business days
Species Reactivity	Human
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	O14668
Applications	Western Blot : 0.5-1ug/ml Flow Cytometry : 1-3ug/million cells Direct ELISA : 0.1-0.5ug/ml
Limitations	This PRRG1/TMG1 antibody is available for research use only.



Flow cytometry testing of fixed and permeabilized human HEL cells with PRRG1/TMG1 antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= PRRG1/TMG1 antibody.



Western blot testing of human 1) HepG2, 2) A431 and 3) PC-3 cell lysate with PRRG1/TMG1 antibody. Predicted molecular weight ~25 kDa.

Description

PRRG1 Antibody recognizes Proline-rich gamma-carboxyglutamic acid protein 1, also known as Transmembrane gamma-carboxyglutamic acid protein 1 (TMG1), a vitamin K-dependent protein characterized by gamma-carboxyglutamic acid-rich domains. PRRG1 belongs to a small family of PRRG proteins that contain extracellular Gla domains and single-pass transmembrane regions. PRRG1 Antibody is frequently described in the literature as TMG1 antibody or Transmembrane gamma-carboxyglutamic acid protein 1 antibody and is used in studies focused on membrane-associated signaling and vitamin K-dependent protein biology.

PRRG1 is predicted to be a type I transmembrane protein with an extracellular Gla domain capable of calcium binding. Gamma-carboxyglutamic acid-containing proteins are typically involved in calcium-dependent interactions and membrane localization. Expression of PRRG1 has been reported in multiple tissues, with membrane-associated localization consistent with its transmembrane structure. The extracellular Gla domain suggests potential roles in cell-cell communication, adhesion, or regulation of signaling pathways at the plasma membrane.

Altered PRRG1 expression has been explored in developmental and cancer-related contexts. As a vitamin K-dependent transmembrane protein, PRRG1 may participate in signaling pathways linked to cellular differentiation, growth regulation, and extracellular matrix interactions. Changes in PRRG1 or TMG1 expression have been evaluated in tumor biology research to better understand membrane-associated regulatory mechanisms and potential involvement in disease progression.

At the molecular level, PRRG1 undergoes gamma-carboxylation of glutamic acid residues within its Gla domain, a modification that is dependent on vitamin K and is essential for calcium binding activity. This biochemical feature distinguishes PRRG1 from many other single-pass membrane proteins. PRRG1 Antibody provides a useful tool for studying transmembrane Gla proteins, calcium-dependent membrane signaling, and the biology of vitamin K-dependent regulatory proteins in normal and diseased tissues.

Application Notes

Optimal dilution of the PRRG1/TMG1 antibody should be determined by the researcher.

Immunogen

E. coli-derived recombinant human protein (amino acids R3-N201) was used as the immunogen for the PRRG1/TMG1 antibody.

Storage

After reconstitution, the PRRG1/TMG1 antibody can be stored for up to one month at 4°C. For long-term, aliquot and store at -20°C. Avoid repeated freezing and thawing.