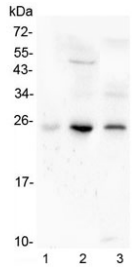
Grancalcin Antibody / GCA (RQ4647)

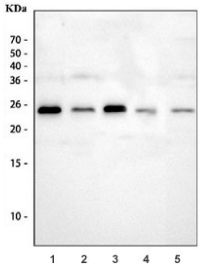
Catalog No.	Formulation	Size
RQ4647	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

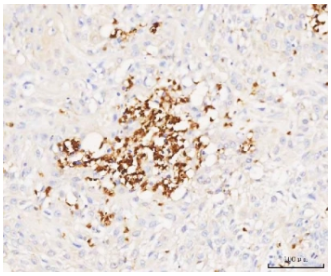
Availability	1-3 business days
Species Reactivity	Human
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	P28676
Applications	Western blot: 0.5-1ug/ml Immunohistochemistry (FFEP): 2-5ug/ml Immunofluorescence: 5ug/ml Flow cytometry: 1-3ug/million cells Direct ELISA: 0.1-0.5ug/ml (human recombinant protein)
Limitations	This Grancalcin antibody is for research use only.



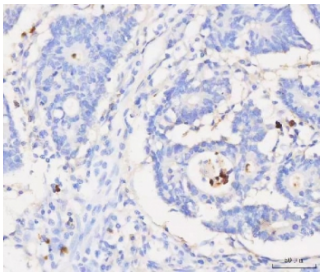
Western blot testing of human 1) placenta, 2) HL-60 and 3) Caco-2 lysate with Grancalcin antibody at 0.5ug/ml. Predicted molecular weight ~24 kDa.



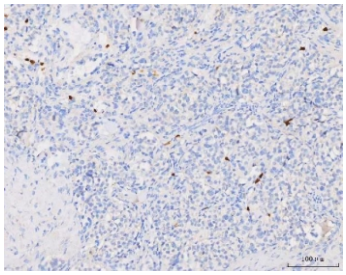
Western blot testing of 1) human MCF7, 2) human HL-60, 3) human HeLa, 4) rat testis and 5) mouse testis tissue lysate with Grancalcin antibody at 0.5ug/ml. Predicted molecular weight ~24 kDa.



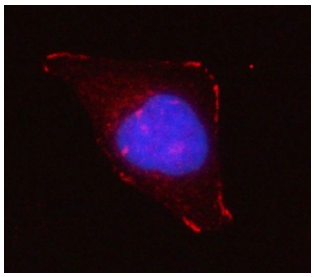
IHC staining of FFPE human bladder urothelial carcinoma tissue with Grancalcin antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



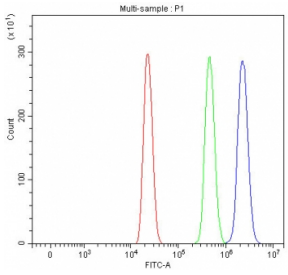
IHC staining of FFPE human colorectal adenocarcinoma tissue with Grancalcin antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



IHC staining of FFPE human lung cancer tissue with Grancalcin antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



Immunofluorescent staining of FFPE human HeLa cells with Grancalcin antibody (red) and DAPI nuclear stain (blue). HIER: steam section in pH6 citrate buffer for 20 min.



Flow cytometry testing of human HL60 cells with Grancalcin antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= Grancalcin antibody.

Description

Grancalcin is a protein that in humans is encoded by the GCA gene. This gene is mapped to 2q24.2. This gene product, grancalcin, is a calcium-binding protein abundant in neutrophils and macrophages. It belongs to the penta-EF-hand subfamily of proteins which includes sorcin, calpain, and ALG-2. Grancalcin localization is dependent upon calcium and magnesium. In the absence of divalent cation, grancalcin localizes to the cytosolic fraction; with magnesium alone, it partitions with the granule fraction; and in the presence of magnesium and calcium, it associates with both the granule and membrane fractions, suggesting a role for grancalcin in granule-membrane fusion and degranulation.

Application Notes

Optimal dilution of the Grancalcin antibody should be determined by the researcher.

Immunogen

Amino acids A42-I217 from the human protein were used as the immunogen for the Grancalcin antibody.

Storage

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

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