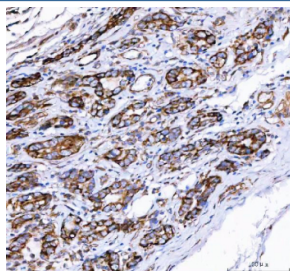


PGC Antibody / Pepsinogen C / Gastricsin (RQ8850)

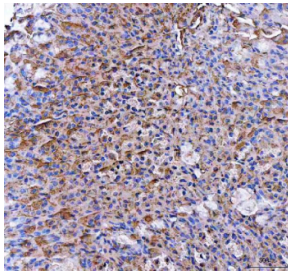
Catalog No.	Formulation	Size
RQ8850	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

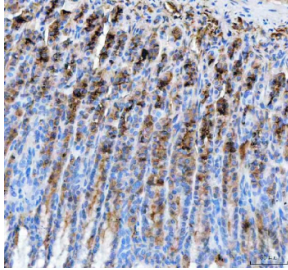
Availability	1-2 days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity chromatography
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	P20142
Applications	Western Blot : 1-2ug/ml Immunohistochemistry (FFPE) : 2-5ug/ml Immunofluorescence : 5ug/ml Flow Cytometry : 1-3ug/million cells ELISA : 0.1-0.5ug/ml
Limitations	This PGC antibody is available for research use only.



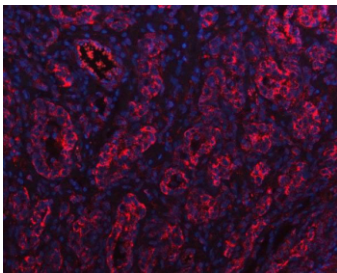
IHC staining of FFPE human gastric adenocarcinoma tissue with PGC antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



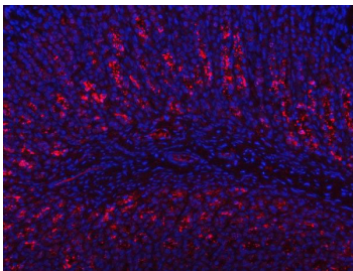
IHC staining of FFPE mouse stomach tissue with PGC antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



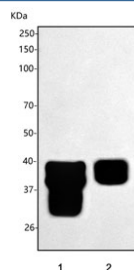
IHC staining of FFPE rat stomach tissue with PGC antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



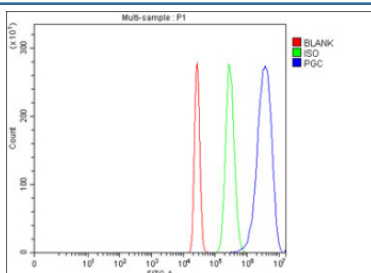
Immunofluorescent staining of FFPE human gastric cancer tissue with PGC antibody (red) and DAPI nuclear stain (blue). HIER: steam section in pH8 EDTA buffer for 20 min.



Immunofluorescent staining of FFPE rat stomach tissue with PGC antibody (red) and DAPI nuclear stain (blue). HIER: steam section in pH8 EDTA buffer for 20 min.



Western blot testing of 1) rat stomach and 2) mouse stomach tissue lysate with PGC antibody. Expected molecular weight: 32-42 kDa (multiple isoforms).



Flow cytometry testing of fixed human HepG2 cells with PGC antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= PGC antibody.

Description

Progastricsin also known as pepsinogen C or pepsinogen II is a pepsinogen precursor of the enzyme gastricsin that in humans is encoded by the PGC gene. This gene encodes an aspartic proteinase that belongs to the peptidase family A1. The encoded protein is a digestive enzyme that is produced in the stomach and constitutes a major component of the gastric mucosa. This protein is also secreted into the serum. This protein is synthesized as an inactive zymogen that includes a highly basic prosegment. This enzyme is converted into its active mature form at low pH by sequential cleavage of the prosegment that is carried out by the enzyme itself. Polymorphisms in this gene are associated with susceptibility to gastric cancers. Serum levels of this enzyme are used as a biomarker for certain gastric diseases including *Helicobacter pylori* related gastritis. Alternate splicing results in multiple transcript variants. A pseudogene of this gene is found on chromosome 1.

Application Notes

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

Immunogen

An E.coli-derived human recombinant protein (amino acids Y145-N356) was used as the immunogen for the PGC antibody.

Storage

After reconstitution, the PGC 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.