
Product Name: PGA5 Mouse Monoclonal Antibody**Catalog #: AMM80778**

For research use only.

Summary

Description	Mouse monoclonal Antibody
Host	Mouse
Application	WB,IHC,ELISA
Reactivity	Human
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Mouse IgG1
Clonality	Monoclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	PBS containing 0.03% sodium azide.
Purification	Affinity Purification

Application

Dilution Ratio	WB 1:500-1:2000,IHC 1:200-1:1000,ELISA 1:5000-1:20000
Molecular Weight	42kDa

Antigen Information

Gene Name	PGA5
Alternative Names	Pepsinogen 5; Pepsin A
Gene ID	5222.0
SwissProt ID	P0DJD9
Immunogen	Purified recombinant fragment of human PGA5 expressed in E. Coli.

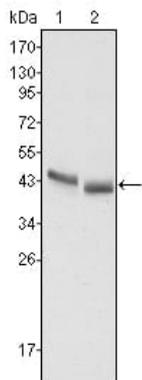
Background

PGA5: Pepsinogen 5, group I (pepsinogen A). Pepsinogens are the inactive precursors of pepsin, the major acid protease found in the stomach. Pepsin is one of the main proteolytic enzymes secreted by the gastric mucosa. Pepsin consists of a single polypeptide chain and arises from its precursor, pepsinogen, by removal of a 41 amino acid segment from the N-terminus.

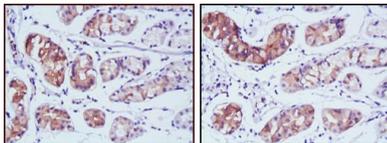
Pepsinogen is synthesized in the stomach lining, and hydrochloric acid, also produced by the gastric mucosa, is necessary to convert the inactive enzyme and to maintain the optimum acidity (pH 1-3) for pepsin function. Pepsin is particularly effective in cleaving peptide bonds involving aromatic amino acids. Pepsin shows extremely broad specificity; although bonds involving phenylalanine and leucine are preferred, many others are also cleaved to some extent. PGA5 is a member of the subfamily A1 within the pepsin family and is the predominant endopeptidase in the gastric juice of vertebrates. PGA5 is inhibited by ovUS-1, a uterine serpin.

Research Area

Image Data



Western blot analysis using PGA5 mouse mAb against HepG2 (1) and SMMC-7721 (2) cell lysate.



Immunohistochemical analysis of paraffin-embedded human stomach cancer tissues using PGA5 mouse mAb with DAB staining.