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PGA5 Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO1326a

Product Information

Application	WB, IHC, E
Primary Accession	P0DJD9
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	2C1
Isotype	IgG1
Calculated MW	41993
Description	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.
Immunogen	Purified recombinant fragment of human PGA5 expressed in E. Coli.
Formulation	Ascitic fluid containing 0.03% sodium azide.

Additional Information

Gene ID	5222
Other Names	Pepsin A-5, 3.4.23.1, Pepsinogen-5, PGA5
Dilution	WB~~1/500 - 1/2000 IHC~~1/200 - 1/1000 E~~N/A
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	PGA5 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	PGA5
Function	Shows particularly broad specificity; although bonds involving phenylalanine and leucine are preferred, many others are also cleaved to some extent.
Cellular Location	Secreted.

References

1. Proc Natl Acad Sci U S A. 2002 Dec 24;99(26):16899-903. 2. Nat Genet. 2004 Jan;36(1):40-5.

Images

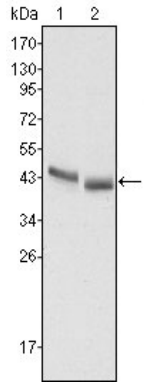


Figure 1: Western blot analysis using PGA5 mouse mAb against HepG2 (1) and SMMC-7721 (2) cell lysate.

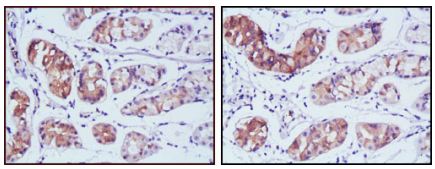


Figure 2: Immunohistochemical analysis of paraffin-embedded human stomach cancer tissues using PGA5 mouse mAb with DAB staining.

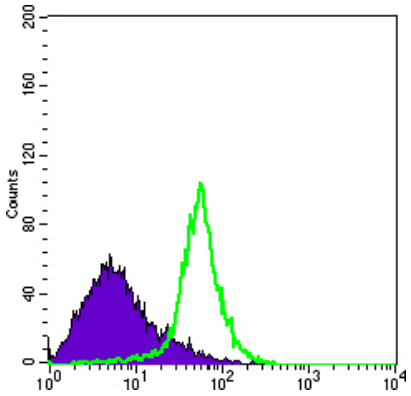


Figure 3: Flow cytometric analysis of Hela cells using ITGA5 mouse mAb (green) and negative control (purple).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.