

**ACP5 Antibody**  
**Purified Mouse Monoclonal Antibody**  
**Catalog # AO1841a****Specification****ACP5 Antibody - Product Information**

Application	WB, IHC, E
Primary Accession	<a href="#">P13686</a>
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Calculated MW	36.6kDa KDa

**Description**

This gene encodes an iron containing glycoprotein which catalyzes the conversion of orthophosphoric monoester to alcohol and orthophosphate. It is the most basic of the acid phosphatases and is the only form not inhibited by L(+)-tartrate.

**Immunogen**

Purified recombinant fragment of human ACP5 (AA: 221-325) expressed in E. Coli.

**Formulation**

Purified antibody in PBS with 0.05% sodium azide

**ACP5 Antibody - Additional Information****Gene ID 54****Other Names**

Tartrate-resistant acid phosphatase type 5, TR-AP, 3.1.3.2, Tartrate-resistant acid ATPase, TrATPase, Type 5 acid phosphatase, ACP5

**Dilution**

WB~~1/500 - 1/2000

IHC~~1/200 - 1/1000

E~~1/10000

**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**

ACP5 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**ACP5 Antibody - Protein Information**

**Name** ACP5

## Function

Involved in osteopontin/bone sialoprotein dephosphorylation. Its expression seems to increase in certain pathological states such as Gaucher and Hodgkin diseases, the hairy cell, the B-cell, and the T- cell leukemias.

## Cellular Location

Lysosome.

## ACP5 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

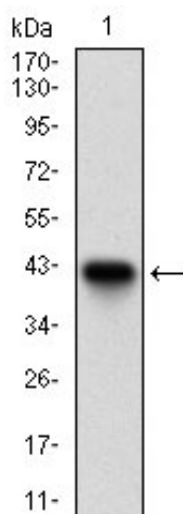
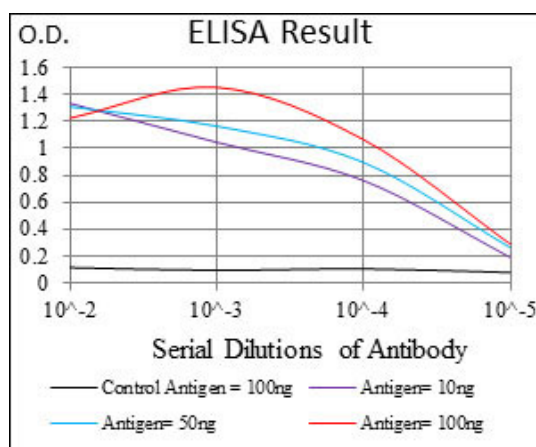


Figure 1: Western blot analysis using ACP5 mAb against human ACP5 recombinant protein. (Expected MW is 37.3 kDa)

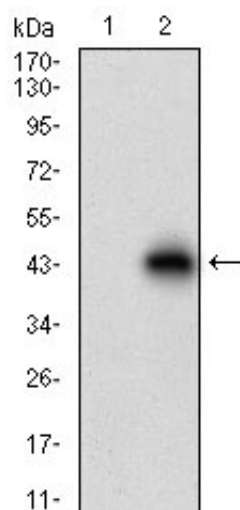


Figure 2: Western blot analysis using ACP5 mAb against HEK293 (1) and ACP5 (AA: 221-325)-hIgGFc transfected HEK293 (2) cell lysate.

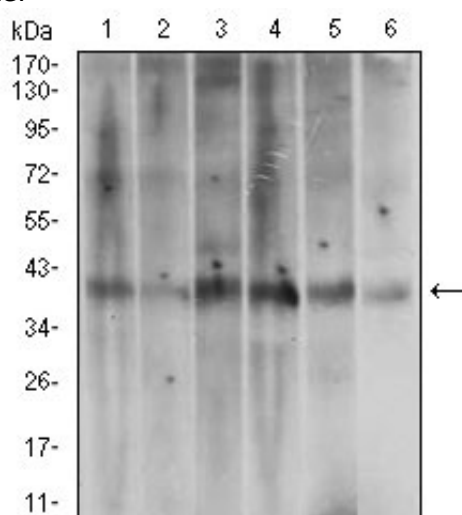


Figure 3: Western blot analysis using ACP5 mouse mAb against A431 (1), T47D (2), HepG2 (3), MOLT4 (4), Jurkat (5) and Hela (6) cell lysate.

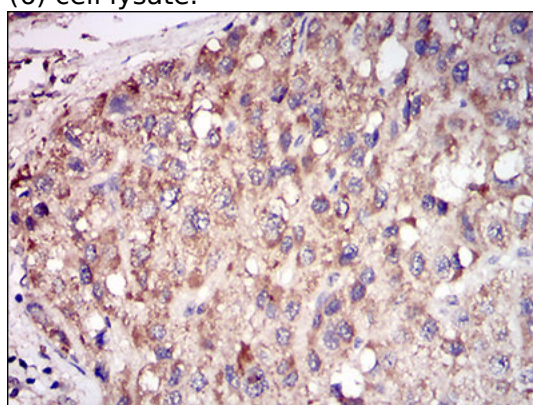


Figure 4: Immunohistochemical analysis of paraffin-embedded liver cancer tissues using ACP5 mouse mAb with DAB staining.

### ACP5 Antibody - Background

The protein encoded by this gene is a small cellular or pericellular matrix proteoglycan that is

closely related in structure to biglycan protein. The encoded protein and biglycan are thought to be the result of a gene duplication. This protein is a component of connective tissue, binds to type I collagen fibrils, and plays a role in matrix assembly. It contains one attached glycosaminoglycan chain. This protein is capable of suppressing the growth of various tumor cell lines. There are multiple alternatively spliced transcript variants known for this gene. This gene is a candidate gene for Marfan syndrome. ;

#### **ACP5 Antibody - References**

1. Clin Chim Acta. 2011 May 12;412(11-12):963-9.
2. Eur J Gynaecol Oncol. 2011;32(6):615-8.