

### **SERPINA7 Antibody**

**Purified Mouse Monoclonal Antibody** Catalog # AO1858a

## **Specification**

## **SERPINA7 Antibody - Product Information**

E, WB, IF, FC, IHC Application

**Primary Accession** P05543 Reactivity Human Host Mouse Clonality **Monoclonal** Isotype laG1

Calculated MW 46.3kDa KDa

**Description** 

There are three proteins including thyroxine-binding globulin (TBG), transthyretin and albumin responsible for carrying the thyroid hormones thyroxine (T4) and 3,5,3'-triiodothyronine (T3) in the bloodstream. This gene encodes the major thyroid hormone transport protein, TBG, in serum. It belongs to the serpin family in genomics, but the protein has no inhibitory function like many other members of the serpin family. Mutations in this gene result in TGB deficiency, which has been classified as partial deficiency, complete deficiency, and excess, based on the level of serum TBG. Alternatively spliced transcript variants encoding different isoforms have been found, but the full-length nature of these variants has not been determined.

## **Immunogen**

Purified recombinant fragment of human SERPINA7 (AA: 168-302) expressed in E. Coli.

### **Formulation**

Purified antibody in PBS with 0.05% sodium azide

## **SERPINA7 Antibody - Additional Information**

### **Gene ID 6906**

### **Other Names**

Thyroxine-binding globulin, Serpin A7, T4-binding globulin, SERPINA7, TBG

#### **Dilution**

E~~1/10000 WB~~1/500 - 1/2000 IF~~1/200 - 1/1000 FC~~1/200 - 1/400 IHC~~1/200 - 1/1000

### 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**

SERPINA7 Antibody is for research use only and not for use in diagnostic or therapeutic



procedures.

## **SERPINA7 Antibody - Protein Information**

Name SERPINA7

**Synonyms TBG** 

**Function** 

Major thyroid hormone transport protein in serum.

**Cellular Location** 

Secreted.

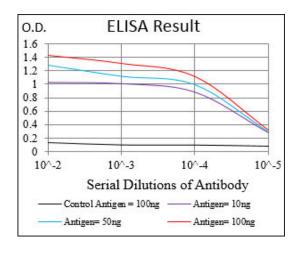
**Tissue Location** 

Expressed by the liver and secreted in plasma.

## **SERPINA7 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 Cytomety
- Cell Culture





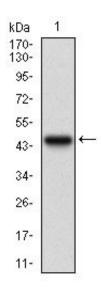


Figure 1: Western blot analysis using SERPINA7 mAb against human SERPINA7 recombinant protein. (Expected MW is 41.4 kDa)

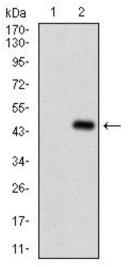


Figure 2: Western blot analysis using SERPINA7 mAb against HEK293 (1) and SERPINA7 (AA: 168-302)-hlgGFc transfected HEK293 (2) cell lysate.

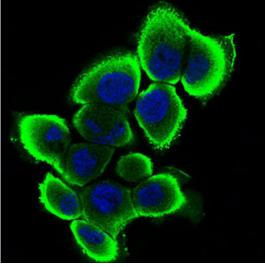


Figure 3: Immunofluorescence analysis of A431 cells using SERPINA7 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye.



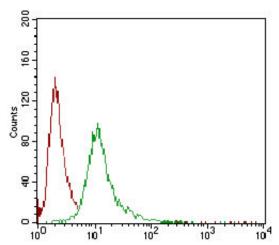


Figure 4: Flow cytometric analysis of A431 cells using SERPINA7 mouse mAb (green) and negative control (red).

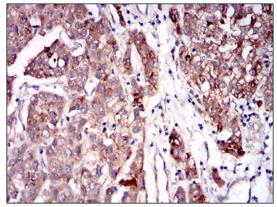


Figure 5: Immunohistochemical analysis of paraffin-embedded liver cancer tissues using SERPINA7 mouse mAb with DAB staining.

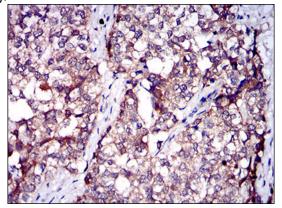
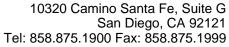
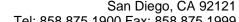


Figure 6: Immunohistochemical analysis of paraffin-embedded bladder cancer tissues using SERPINA7 mouse mAb with DAB staining.

## **SERPINA7 Antibody - Background**

Papilin is an extracellular matrix glycoprotein involved in, thin matrix layers during gastrulation, matrix associated with wandering, phagocytic hemocytes, basement membranes and space-filling matrix during Drosophila development. Determination of its cDNA sequence led to the identification of Caenorhabditis and mammalian papilins. A distinctly conserved 'papilin cassette' of domains at the amino-end of papilins is also the carboxyl-end of the ADAMTS subgroup of secreted, matrix-associated metalloproteinases; this cassette contains one thrombospondin type 1 (TSR) domain, a specific cysteine-rich domain and several partial TSR domains. In vitro, papilin







non-competitively inhibits procollagen N-proteinase, an ADAMTS metalloproteinase.;

# **SERPINA7 Antibody - References**

1. Gene. 2012 Sep 15;506(2):289-94. 2. Endocr Regul. 2010 Apr;44(2):43-7.