

# Alpha-1-microglobulin Polyclonal antibody

Catalog Number: 26716-1-AP

## Basic Information

<b>Catalog Number:</b> 26716-1-AP	<b>GenBank Accession Number:</b> BC041593	<b>Purification Method:</b> Antigen affinity purification
<b>Size:</b> 150ul , Concentration: 1000 ug/ml by Nanodrop;	<b>GeneID (NCBI):</b> 259	<b>Recommended Dilutions:</b> WB 1:5000-1:50000 IHC 1:50-1:500
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P02760	
<b>Isotype:</b> IgG	<b>Full Name:</b> alpha-1-microglobulin/bikunin precursor	
<b>Immunogen Catalog Number:</b> AG25239	<b>Calculated MW:</b> 352 aa, 39 kDa <b>Observed MW:</b> 30 kDa	

## Applications

### Tested Applications:

WB, IHC, ELISA

### Species Specificity:

human

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

### Positive Controls:

WB : human plasma, human urine

IHC : human intrahepatic cholangiocarcinoma tissue, human stomach cancer tissue

## Background Information

Alpha-1-microglobulin (A1M) is also named as Protein AMBP, Bikunin, Trypstatin and Inter-alpha-trypsin inhibitor light chain (ITI-LC). A1M belongs to the lipocalin protein family, a group of structural proteins with a similar one-domain fold that are found in bacteria, plants and animals (PMID: 2580349). A1M is recognized as a physiological antioxidant with powerful cell- and tissue-protective properties (PMID: 11877257). Whereas A1M is a heme and radical scavenger, and a reductase, bikunin is a structural component of extracellular matrix and has protease inhibitor and anti-inflammatory properties (PMID: 27988357). In humans, the majority of A1M is synthesized in the liver, but smaller quantities are also expressed in most other cells in the body. In the blood, equal quantities of two forms of A1M can be found: a free monomeric form and a covalent high-molecular weight complex bound to immunoglobulin A, albumin and prothrombin (PMID: 6196366, PMID: 9183005). Endogenous A1M has also been described to be localized ubiquitously in the dermal and epidermal layers of skin, and in syncytiotrophoblasts, monocytes/macrophages, vascular endothelium and extracellular matrix of placental tissue and extracellular matrix (PMID: 22096585, PMID: 21356557). Alpha 1 microglobulin, also known as HI30, is a 27-30 kDa glycoprotein, present in various body fluids. It belongs to the lipocalin superfamily of hydrophobic ligand-binding proteins forming an internal ligand-binding pocket. The protein acts as a mediator of bacterial adhesion to polymer surfaces and is involved in inhibiting renal lithogenesis.

## Storage

### Storage:

Store at -20°C. Stable for one year after shipment.

### Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

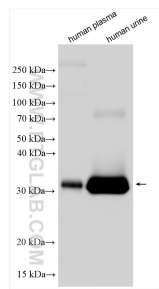
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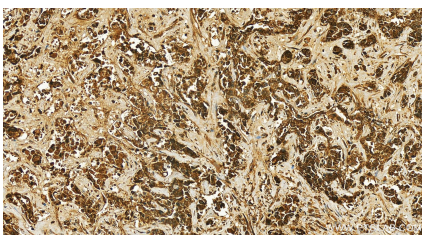
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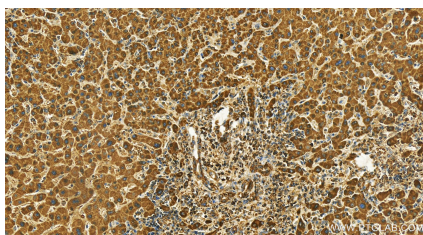
## Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 26716-1-AP (Alpha 1 microglobulin antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human intrahepatic cholangiocarcinoma tissue slide using 26716-1-AP (Alpha 1 microglobulin antibody) at dilution of 1:200 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human intrahepatic cholangiocarcinoma tissue slide using 26716-1-AP (Alpha 1 microglobulin antibody) at dilution of 1:200 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).