For Research Use Only

## Alpha-1-microglobulin Polyclonal antibody

Catalog Number: 26716-1-AP



**Basic Information** 

Catalog Number: 26716-1-AP

Size: GenelD (NCBI): 1000 ug/ml 259

Source: UNIPROT ID:
Rabbit P02760
Isotype: Full Name:

IgG alpha-1-microglobulin/bikunin

Immunogen Catalog Number: precursor

AG25239 Calculated MW:

352 aa, 39 kDa Observed MW: 30 kDa

BC041593

GenBank Accession Number:

Purification Method: Antigen affinity purification Recommended Dilutions: WB 1:5000-1:50000

IHC 1:50-1:500

**Applications** 

Tested Applications: WB, IHC, ELISA Species Specificity:

humar

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 syncytiothrophoblasts, monocytes/macrophages, vascular endothelium and extracellular matrix of placental tissue and extracellular matrix (PMID: 22096585, PMID: 21356557). Alpha 1 microglobulin, also known as H130, 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

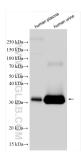
Storage:

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

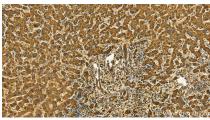
## **Selected Validation Data**



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 paraffinembedded 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 paraffinembedded 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).