For Research Use Only

Alpha-2-Macroglobulin Polyclonal antibody



Catalog Number: 13545-1-AP

2 Publications

Basic Information

Catalog Number: 13545-1-AP Size:

500 μg/ml

Source: Rabbit Isotype:

Immunogen Catalog Number:

AG4489

GenBank Accession Number: BC040071

GeneID (NCBI):

UNIPROT ID: P01023 Full Name:

alpha-2-macroglobulin

Calculated MW: 1474 aa, 163 kDa

Observed MW:

185 kDa

Antigen affinity purification Recommended Dilutions:

Purification Method:

WB 1:5000-1:20000 IP 0.5-4.0 ug for 1.0-3.0 mg of total

protein lysate IHC 1:50-1:500 IF 1:50-1:500

Applications

Tested Applications:

IF/ICC, IHC, IP, WB, ELISA

Cited Applications:

Species Specificity:

human

Cited Species: human, Plasmodium falciparum

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 blood tissue, human brain tissue, HepG2

cells, human plasma tissue

IP: HepG2 cells,

IHC: human liver tissue,

IF: HepG2 cells,

Background Information

alpha-2-macroglobulin, also known as $\,^{\circ}$ 2-macroglobulin ($\,^{\circ}$ 2M or A2M), is a protein abundant in the plasma of vertebrates and several invertebrates. A2M is an evolutionarily conserved arm of the innate immune system. It also mediates the proliferation of T cells and macrophages. A2M acts as a nonspecific protease inhibitor involved in the host defense mechanism that inactivates both endogenous and exogenous proteases, including trypsin, thrombin and collagenase. Even though A2M is produced predominantly by the liver, it may also be expressed in the reproductive tract, heart, and brain, and may have important roles in many physiological processes and medical illnesses including Alzheimer's disease.

Notable Publications

Author	Pubmed ID	Journal	Application
Takahiro Tougan	32295584	MalarJ	WB
Riikka Lampinen	35456941	Int J Mol Sci	WB

Storage

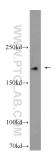
Store at -20°C. Stable for one year after shipment.

Storage Buffer:

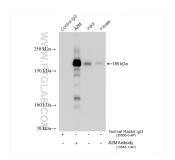
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

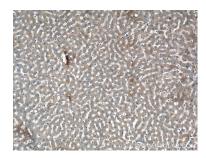
Selected Validation Data



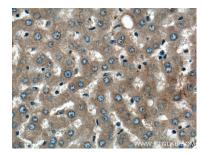
human blood were subjected to SDS PAGE followed by western blot with 13545-1-AP (Alpha-2macroglobulin antibody) at dilution of 1:6000 incubated at room temperature for 1.5 hours.



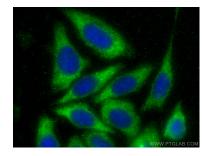
IP result of anti-Alpha-2-Macroglobulin (IP:13545-1-AP, 4ug; Detection:13545-1-AP 1:2000) with HepG2 cells lysate 1080 ug.



Immunohistochemical analysis of paraffinembedded human liver tissue slide using 13545-1-AP (Alpha-2-macroglobulin antibody) at dilution of 1:200 (under 10x lens).



Immunohistochemical analysis of paraffinembedded human liver tissue slide using 13545-1-AP (Alpha-2-macroglobulin antibody) at dilution of 1:200 (under 40x lens).



Immunofluorescent analysis of (-20°C Ethanol) fixed HepG2 cells using Alpha-2-Macroglobulin antibody (13545-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).