# abcam

## Product datasheet

# Anti-Alpha 1 microglobulin antibody ab47980

# 2 图像

### 概述

产**品名称** Anti-Alpha 1 microglobulin**抗体** 

描述 兔多克隆抗体to Alpha 1 microglobulin

**宿主** Rabbit

经测试应用 适用于: ICC/IF, IHC-P

种属反应性 与反应: Human

免疫原 Human Alpha 1 Microglobulin

常规说明

The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

性能

形式 Liquid

存放说明 Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long

term.

**存储溶液** pH: 7.40

Preservative: 0.02% Sodium azide

Constituents: 49.98% PBS, 50% Glycerol (glycerin, glycerine)

纯**度** Protein G purified

 克隆
 多克隆

 同种型
 IqG

应用

The Abpromise guarantee Abpromise™承诺保证使用ab47980于以下的经测试应用

"应用说明"部分下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

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应用	Ab评论	说明
ICC/IF		Use a concentration of 1 - 5 μg/ml.
IHC-P		Use a concentration of 4 μg/ml.

#### 靶标

功能 Inter-alpha-trypsin inhibits trypsin, plasmin, and lysosomal granulocytic elastase. Inhibits

calcium oxalate crystallization. Trypstatin is a trypsin inhibitor.

组织特异性 Expressed by the liver and secreted in plasma. Alpha-1-microglobulin occurs in many

physiological fluids including plasma, urine, and cerebrospinal fluid. Inter-alpha-trypsin inhibitor is

present in plasma and urine.

序列相似性 In the N-terminal section; belongs to the calycin superfamily. Lipocalin family.

Contains 2 BPTI/Kunitz inhibitor domains.

翻译后修饰 The precursor is proteolytically processed into separately functioning proteins.

3-hydroxykynurenine, an oxidized tryptophan metabolite that is common in biological fluids, reacts with Cys-53, Lys-111, Lys-137, and Lys-149 to form heterogeneous polycyclic chromophores including hydroxanthommatin. The reaction by alpha-1-microglobulin is autocatalytic; the human protein forms chromophore even when expressed in insect and bacterial cells. The chromophore can react with accessible cysteines forming non-reducible thioether cross-links with other

molecules of alpha-1-microglobulin or with other proteins such as lg alpha-1 chain C region 'Cys-

352'.

Heavy chains are interlinked with bikunin via a chondroitin 4-sulfate bridge to the their C-terminal

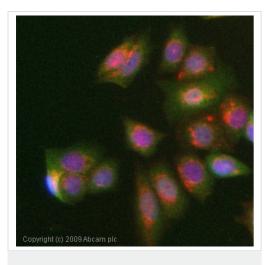
aspartate.

Addition of glycosaminoglycan chondroitin sulfate, allows cross-linking between the different

components.

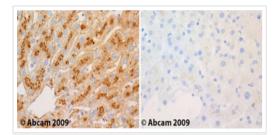
细胞定位 Secreted.

#### 图片



Immunocytochemistry/ Immunofluorescence - Anti-Alpha 1 microglobulin antibody (ab47980)

ICC/IF image of ab47980 stained MCF7 cells. The cells were 4% PFA fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab47980, 1 $\mu$ g/ml) overnight at +4°C. The secondary antibody (green) was Alexa Fluor® 488 goat anti-rabbit lgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43 $\mu$ M.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Alpha 1 microglobulin antibody (ab47980)

ab47980 Microglobulin alpha 1 in human liver.

Left panel: with primary antibody at 4 ug/ml. Right panel: isotype control.

Sections were stained using an automated system (DAKO Autostainer Plus), at room temperature: sections were rehydrated and antigen retrieved with the Dako 3 in 1 AR buffers EDTA pH 9.0. Slides were peroxidase blocked in 3% H2O2 in methanol for 10 mins. They were then blocked with Dako Protein block for 10 minutes (containing casein 0.25% in PBS) then incubated with primary antibody for 20 min and detected with Dako envision flex amplification kit for 30 minutes. Colorimetric detection was completed with Diaminobenzidine for 5 minutes. Slides were counterstained with Haematoxylin and coverslipped under DePeX. Please note that for manual staining we recommend to optimize the primary antibody concentration and incubation time (overnight incubation), and amplification may be required.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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- Extensive multi-media technical resources to help you
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