abcam

Product datasheet

Native Human Alpha 1 microglobulin protein ab96148

Description

Product name	Native Human Alpha 1 microglobulin protein
Expression system	Native
Accession	P02760
Protein length	Full length protein
Animal free	No
Nature	Native
Species	Human
Predicted molecular weight	30 kDa
Amino acids	20 to 203

Specifications

Our Abpromise guarantee covers the use of **ab96148** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	Radial Immunodiffusion SDS-PAGE
Form	Lyophilized
Additional notes	Starting material tested and found negative for HIV I & II antibodies, Hepatitis B surface antigen, and Hepatitis C antibodies.

Preparation and Storage

Stability and Storage	Shipped at 4°C. Store at +4°C. Constituent: 0.158% Ammonium bicarbonate May contain traces of buffer salts
Reconstitution	Reconstitution in phosphate buffer, pH >7.0 containing 0.15M NaCl is recommended.

General Info

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

	calcium oxalate crystallization. Trypstatin is a trypsin inhibitor.
Tissue specificity	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.
Sequence similarities	In the N-terminal section; belongs to the calycin superfamily. Lipocalin family. Contains 2 BPTI/Kunitz inhibitor domains.
Post-translational modifications	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 Ig 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.
Cellular localization	Secreted.

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