Recombinant Human Alpha-2-macroglobulin/A2M Protein

Catalog No.: RP02788LQ

Sequence Information

Species
Human

Gene ID
2

Swiss Prot
P01023

Tags
C-His

Synonyms
A2M, CPAMD5, FWP007,Alpha-2-macroglobulin, Alpha-2-M

Product Information

Source
Baculovirus-Insect Cells

Purification
≥ 85 % as determined by SDS-PAGE.

Calculated MW
164 kDa

Observed MW
160-170 kDa

Endotoxin
< 1 EU/μg of the protein by LAL method.

Formulation
Supplied as sterile 20mM Tris, 150mM NaCl, 20% glycerol, pH 7.4

Reconstitution

Background

alpha-2-macroglobulin, also known as α2-macroglobulin (α2M and A2M), is an abundant protein of the plasma of vertebrates and members of several invertebrate phyla and functions as a broad-spectrum protease-binding protein. alpha-2-macroglobulin is produced by the liver, and is a major component of the alpha-2 band in protein electrophoresis. alpha-2-macroglobulin is a large plasma glycoprotein that has long been known as an irreversible inhibitor of a variety of proteinases. More recently, it has been reported that numerous growth factors, cytokines and hormones bind to alpha 2M through diverse mechanisms. A2M is also produced in the brain where it binds multiple extracellular ligands and is internalized by neurons and astrocytes. In the brain of Alzheimer's disease (AD) patients, A2M has been localized to diffuse amyloid plaques. A2M also binds soluble beta-amyloid, of which it mediates degradation. Protease-conjugated alpha2-macroglobulin is selectively bound by cells contacting the body fluids and alpha2-macroglobulin and its protease cargo are then internalized and degraded in secondary lysosomes of those cells. In addition to this function as an agent for protease clearance, alpha2-macroglobulin binds a variety of other ligands, including several peptide growth factors and modulates the activity of a lectin-dependent cytolytic pathway in arthropods.

Basic Information

Description
Recombinant Human Alpha-2-macroglobulin/A2M Protein is produced by Baculovirus-Insect Cells system. The target protein is expressed with sequence (Met 1-Ala 1474) of Human Alpha-2-macroglobulin/A2M(Accession #NP_000005.2) fused with His tag at the C-Terminus.

Activity
Measured by its ability to trap trypsin. The trapped trypsin is no longer able to interact with protein substrates or inhibitors, but still able to cleave small peptide substrates or inhibitors.
The IC50 value is <5 nM.

Shipping
Lyophilized proteins are shipped at ambient temperature.
Liquid proteins are shipped at frozen temperature with dry ice.
Upon receipt, store it immediately at the temperature recommended below.

Storage
Store at -70℃

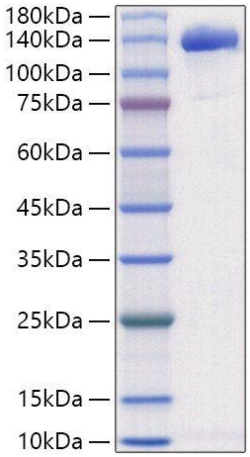
Operational Notes
For your safety and health, please wear a lab coat and disposable gloves for handling.

Contact

400-999-6126
cn.market@abclonal.com.cn
www.abclonal.com.cn

For research use only. Not for therapeutic or diagnostic purposes.
Please visit http://abclonal.com for a complete listing of recommended products.

Validation Data



Recombinant Human Alpha-2-macroglobulin/A2M Protein was determined by SDS-PAGE under reducing conditions with Coomassie Blue.