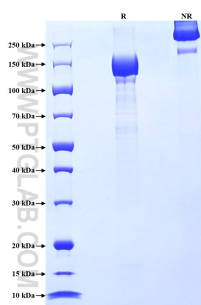


Recombinant Human Alpha-2-Macroglobulin protein (His Tag)

Catalog Number: Eg1198

Basic Information	Species: Human	Purity: >90 %, SDS-PAGE	Tag: His Tag
Technical Specifications	<p>Purity: >90 %, SDS-PAGE</p> <p>Endotoxin Level: <0.1 EU/ µg protein, LAL method</p> <p>Source: HEK293-derived Human Alpha-2-Macroglobulin protein Ser24-Ala1474 (Accession# P01023) with a His tag at the C-terminus.</p> <p>GeneID: 2</p> <p>Accession: P01023</p> <p>Predicted Molecular Mass: 161.9 kDa</p> <p>SDS-PAGE: 120-200 kDa, reducing (R) conditions</p> <p>Formulation: Lyophilized from 0.22 µm filtered solution in PBS, pH 7.4. Normally 5% trehalose and 5% mannitol are added as protectants before lyophilization.</p>		
Biological Activity	Not tested		
Storage and Shipping	<p>Storage: It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.</p> <ul style="list-style-type: none">• Until expiry date, -20°C to -80°C as lyophilized proteins.• 3 months, -20°C to -80°C under sterile conditions after reconstitution. <p>Shipping: The product is shipped at ambient temperature. Upon receipt, store it immediately at the recommended temperature.</p>		
Reconstitution	Briefly centrifuge the tube before opening. Reconstitute at 0.1-0.5 mg/mL in sterile water.		
Background	<p>Alpha-2-Macroglobulin, also known as α₂-macroglobulin (α₂M 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.</p>		
References	<ol style="list-style-type: none">1. Jennifer Vandooren, Yoshifumi Itoh. (2021) Front Immunol. Dec 14:12:803244.2. Jeremy Lagrange, et al. (2022) J Thromb Haemost. Apr;20(4):806-815.3. Hongwei Zhang, et al. (2023) J Alzheimers Dis Rep. Dec 18;7(1):1351-1370.		
Synonyms	A2M, Alpha 2 M, alpha 2 macroglobulin, Alpha 2M, Alpha-2-M		

Selected Validation Data



Purity of Recombinant Human Alpha-2-Macroglobulin was determined by SDS-PAGE. The protein was resolved in an SDS-PAGE in reducing (R) and non-reducing (NR) conditions and stained using Coomassie blue.