For Research Use Only

Recombinant Mouse Albumin protein (His Tag)

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Catalog Number: Eg0886

Basic Information

Species: Mouse

Purity: >90 %, SDS-PAGE

Tag: His Tag

Technical Specifications

Purity:
>90 %, SDS-PAGE

Endotoxin Level:
<0.1 EU/ μ g protein, LAL method

Source:
HEK293-derived Mouse Albumin protein Glu25-Ala608 (Accession# P07724) with a His tag at the C-terminus.

GeneID:
11657

Accession:
P07724

Predicted Molecular Mass:
67.0 kDa

SDS-PAGE:
60-68 kDa, reducing (R) conditions

Formulation:
Lyophilized from 0.22 μ m filtered solution in PBS, pH 7.4. Normally 5% trehalose and 5% mannitol are added as protectants before lyophilization.

Biological Activity

Not tested

Storage and Shipping

Storage:
It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

- Until expiry date, -20℃ to -80℃ as lyophilized proteins.
- 3 months, -20℃ to -80℃ under sterile conditions after reconstitution.

Shipping:
The product is shipped at ambient temperature. Upon receipt, store it immediately at the recommended temperature.

Reconstitution

Briefly centrifuge the tube before opening. Reconstitute at 0.1-0.5 mg/mL in sterile water.

Background

Albumin is one of the main proteins in animal species, which plays a decisive role in the transport of various ions and in maintaining the colloidal osmotic pressure of the blood. Albumin is able to bind to almost all known drugs, as well as many nutraceuticals and toxic substances, largely determining their pharmaco-and toxicokinetics. Albumin is not only passive, but also an active participant of pharmacokinetic and toxicokinetic processes, possessing a number of enzymatic activities. Numerous experiments have shown esterase or pseudoesterase activity of albumin towards a number of endogeneous and exogeneous esters. Due to the free thiol group of Cys34, albumin can serve as a trap for reactive oxygen and nitrogen species, thus participating in redox processes. Glycated albumin makes a significant contribution to the pathogenesis of diabetes and other diseases. The interaction of albumin with blood cells, blood vessels and tissue cells outside the vascular bed is of great importance. Interactions with endothelial glycocalyx and vascular endothelial cells largely determine the integrative role of albumin.

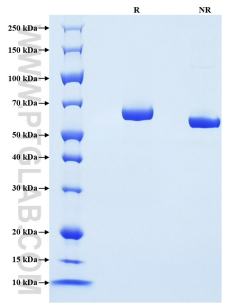
References

1. Belinskaia DA, et al. (2021). J Evol Biochem Physiol. 57(6):1419-1448.
2. Raoufinia R, et al. (2016). Adv Pharm Bull. 6(4):495-507.
3. Sleep D. (2015). Expert Opin Drug Deliv. 12(5):793-812.
4. Nakashima F, et al. (2018). Sci Rep. 17;8(1):932.
5. He XM, et al. (1992). Nature. 358(6383):209-15.

Synonyms

Alb, Alb 1, Alb1

Selected Validation Data



Purity of Recombinant Mouse Albumin 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.