For Research Use Only

Recombinant Human AOC3 protein (rFc Tag)

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Catalog Number: Eg5045

Basic Information

Species:
Human

Purity:
>90 %, SDS-PAGE

Tag:
rFc Tag

Technical Specifications

Purity:
>90 %, SDS-PAGE

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

Source:
HEK293-derived Human AOC3 protein Gly27-Asn763 (Accession# Q16853-1) with a rabbit IgG Fc tag at the N-terminus.

GeneID:
8639

Accession:
Q16853-1

Predicted Molecular Mass:
109.0 kDa

SDS-PAGE:
110-140 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

AOC3 (Amine Oxidase Copper Containing 3), also known as VAP-1 (vascular adhesion protein-1), belongs to the copper-dependent amine oxidase family and is a membrane-bound monoamine oxidase. This protein catalyzes the oxidative deamination of primary amines to produce aldehydes, hydrogen peroxide, and ammonia, thereby participating in inflammatory responses and transendothelial migration of leukocytes. AOC3 is significantly upregulated in chronic inflammatory diseases (e.g., rheumatoid arthritis, atherosclerosis, non-alcoholic fatty liver disease), and its soluble form (sVAP-1) can serve as a biomarker of systemic inflammation. As a drug target, AOC3 inhibitors are being developed for the treatment of metabolic and autoimmune diseases.

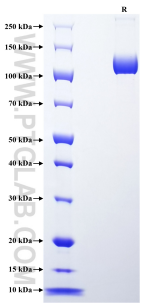
References

1. Boyer, David S et al. International journal of retina and vitreous vol. 7,1 (2021): 30.
2. Qi, Luxia et al. Heliyon vol. 10,17 (2024): e37070.
3. Özcan, Özge et al. In vivo (Athens, Greece) vol. 38,5 (2024): 2300-2309.
4. Filip, Anna et al. Frontiers in cardiovascular medicine vol. 9 (2022): 848680.

Synonyms

VAP1, Amine oxidase [copper-containing] 3, Amine oxidase copper-containing 3, Copper amine oxidase, EC:1.4.3.21

Selected Validation Data



Purity of Recombinant Human AOC3 was determined by SDS-PAGE. The protein was resolved in an SDS-PAGE in reducing (R) conditions and stained using Coomassie blue.