

Amine Oxidase, Copper Containing 3 (AOC3) Active Protein | AOC3 active protein

Active Amine Oxidase, Copper Containing 3 (AOC3)

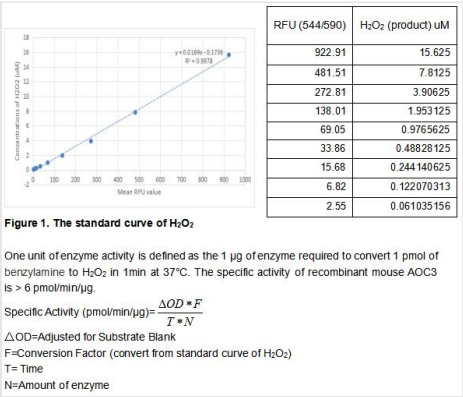
CATALOG # AAA161883	HOST 293F cell	APPLICATIONS Activity Assay, Cell Culture
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PRODUCT SYNONYMS

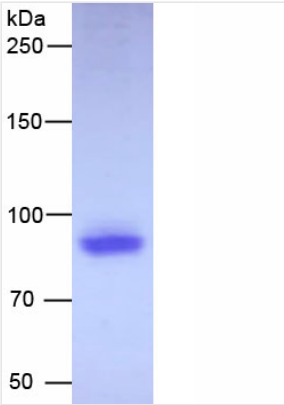
Amine Oxidase; Copper Containing 3 (AOC3); Active Amine Oxidase; Copper Containing 3; AOC3 active protein (eukaryotic; 293F cell); Mouse; VAP1; HPAO; SSAO; Membrane primary amine oxidase; Vascular Adhesion Protein 1; Semicarbazide-Sensitive Amine Oxidase; Copper-Containing Amine Oxygen Oxidoreductase4; AOC3 active protein

PRODUCT SPECIFICATIONS

Host	293F cell
Purity/Purification	Greater than 90% by SDS-PAGE
Form/Format	Freeze-dried powder; PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.
Sequence	Arg28~Asn7 65
Applicable Applications for AOC3 active protein	Activity Assay, Cell Culture
Species	Mouse
Expression System	Eukaryotic expression
Tag	N-terminal His Tag
Endotoxin Level	<1.0EU per 1ug (determined by the LAL method)
Isoelectric Point	6.3
Research Area	Enzyme & Kinase, Infection immunity, Endocrinology, Bone metabolism, Rheumatology
Preparation and Storage	Store at 2-8 degree C for one month, -80 degree C for 12 months



SDS-PAGE
Figure. SDS-PAGE



Bioactivity

Amine Oxidase, Copper Containing 3 (AOC3) is a copper amine oxidase with a topaquinone cofactor. AOC3 is a Type II integral membrane protein, but a soluble form of the enzyme is present in human serum, and its level increases in diabetes and some inflammatory liver diseases. AOC3 catalyzes the oxidative deamination of small primary amines such as methylamine, benzylamine, and aminoacetone in a reaction that produces an aldehyde, ammonia, and H₂O₂. The enzyme is sensitive to inhibition by semicarbazide. AOC3 expression is highest in the endothelium of lung, heart, and intestine, but low in tissues such as brain, spleen, kidney, and liver. The activity of recombinant mouse AOC3 was measured by its ability to produce hydrogen peroxide during the oxidation of benzylamine. The reaction was performed in 50 mM HEPES, pH 7.5 (assay buffer), initiated by addition 50 μL of various concentrations of AOC3 (diluted by assay buffer) to 50 μL substrate mixture of 2 mM Benzylamine, 2 units/mL HRP and 100 μM AUR. Read at excitation and emission wavelengths of 544 nm and 590 nm (top read), respectively in kinetic mode for 5 minutes.

ADDITIONAL INFORMATION

Product Categories/Family for AOC3 active protein	Active proteins
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NCBI AND UNIPROT INFORMATION

NCBI GI #	6753066
NCBI GeneID	11754
NCBI Accession #	NP_033805.1
NCBI GenBank Nucleotide #	NM_009675.2
UniProt Accession #	O70423; Q66JM4; Q9R055; A2A4I7
Molecular Weight	69,527 Da
NCBI Official Full Name	membrane primary amine oxidase
NCBI Official Synonym Full Names	amine oxidase, copper containing 3
NCBI Official Symbol	Aoc3
NCBI Official Synonym Symbols	SSAO; VAP1
NCBI Protein Information	membrane primary amine oxidase
UniProt Protein Name	Membrane primary amine oxidase
UniProt Gene Name	Aoc3
UniProt Synonym Gene Names	Vap1; SSAO; VAP-1

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/293f-cell-active-protein/amine-oxidase-copper-containing-3-aoc3/161883>