

Recombinant Protein Technical Manual Recombinant Human VAP/AOC3 Protein (His Tag) RPES4445

**Product Data:** 

Product SKU: RPES4445	Size: 10µg
Species: Human	Expression host: Human Cells

Uniprot: Q16853

## **Protein Information:**

Molecular Mass:	82.6 kDa
AP Molecular Mass:	64 kDa
Tag:	C-6His
Bio-activity:	
Purity:	> 95 % as determined by reducing SDS-PAGE.
Endotoxin:	< 1.0 EU per $\mu g$ as determined by the LAL method.
Storage:	Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.
Shipping:	This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at<-20°C.
Formulation:	Supplied as a 0.2 $\mu m$ filtered solution of 20mM Tris, 500mM NaCl, pH8.0
Reconstitution:	Please refer to the printed manual for detailed information.
Application:	
Synonyms:	Membrane primary amine oxidase; Copper amine oxidase; HPAO; Semicarbazide- sensitive amine oxidase; SSAO; Vascular adhesion protein 1; VAP; AOC3; VAP1

## Sequence: Arg27-Asn763

## Background:

Vascular adhesion protein(VAP) is a copper amine oxidase with a topaquinone cofactor. VAP 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. VAP catalyzes the oxidative deamination of small primary amines such as methylamine, benzylamine, and aminoacetone in a reaction that produces an aldehyde, ammonia, and H2O2. VAP vascular expression is regulated at sites of inflammation through its release from intracellular granules in which the protein is stored. The adhesive function of VAP has been demonstrated in studies showing that the protein is important for the adherence of certain lymphocyte subtypes to inflamed endothelial tissues. VAP mediated adhesion is involved in the process of leukocyte extravasation, an important feature of inflammatory responses. VAP is considered to be a therapeutic target for diabetes, oxidative stress, and inflammatory diseases.