Recombinant Protein Technical Manual

Recombinant Human VAP/AOC3 Protein (Fc Tag)

RPES0978

Product Data:

Product SKU: RPES0978

Size: 10µg

Species: Human

Expression host: Human Cells

Uniprot: Q16853

Protein Information:

Molecular Mass: 108.5 kDa

AP Molecular Mass: 120 kDa

Tag: C-Fc

Bio-activity:

Purity: > 95% as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: Lyophilized protein should be stored at < -20℃, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from a 0.2 µm 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; Semicarbazide-sensitive amine oxidase; Vascular adhesion protein 1; AOC3; VAP; SSAO; HPAO;VAP1

Immunogen Information:

Sequence: Arg28-Asn763

Background:

Membrane primary amine oxidase(AOC3), also known as vascular adhesion protein (VAP) and HPAO, this protein is a member of the semicarbazide-sensitive amine oxidase (SSAO) family. VAP is a type 1 membrane-bound glycoprotein that has a distal adhesion domain and an enzymatically active amine oxidase site outside of the membrane, VAP has adhesive properties, functional monoamine oxidase activity, and possibly plays a role in glucose handling, leukocyte trafficking, and migration during inflammation. This rise in metabolic products contributes to generating advanced glycation end-products and oxidative stress along with the monoamine detoxification in the organism. It is highly expressed on the endothelium of the lung and trachea, and absent from leukocytes and epithelial cells. Membrane-bound VAP releases an active, soluble form of the protein, which may be conducive to increased inflammation and the progression of many vascular disorders. In particular, elevation of VAP activity and the increased enzymatic-mediated deamination is proposed to play a role in renal and vascular disease, oxidative stress, acute and chronic hyperglycemia, and diabetes complications.