



Recombinant Protein Technical Manual
Recombinant Mouse VNN1/Vanin Protein (His Tag)
RPES3645

Product Data:

Product SKU: RPES3645

Size: 50µg

Species: Mouse

Expression host: HEK293 Cells

Uniprot: Q9Z0K8

Protein Information:

Molecular Mass: 53.4 kDa

AP Molecular Mass: 60 kDa

Tag: C-His

Bio-activity:

Purity: > 97 % as determined by SDS-PAGE

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

Storage: Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

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

Formulation: Lyophilized from sterile PBS, pH 7.4

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: V

Immunogen Information:

Sequence: Met 1-Ser 487

Background:

Pantetheinase, also known as Pantetheine hydrolase, Vascular non-inflammatory molecule 1, Vanin, and VNN1, is a cell membrane protein which belongs to the CN hydrolase family and BTD/VNN subfamily. Vanin contains one CN hydrolase domain. It is widely expressed with higher expression in spleen, kidney and blood. It is overexpressed in lesional psoriatic skin. Vanin is also a member of the Vanin family of proteins which share extensive sequence similarity with each other, and also with biotinidase. The family includes secreted and membrane-associated proteins, a few of which have been reported to participate in hematopoietic cell trafficking. No biotinidase activity has been demonstrated for any of the vanin proteins, however, they possess pantetheinase activity, which may play a role in oxidative-stress response. Vanin is an epithelial pantetheinase that provides cysteamine to tissue and regulates response to stress. Vanin is expressed by enterocytes, and its absence limits intestinal epithelial cell production of proinflammatory signals. Vanin regulates late adhesion steps of thymus homing under physiological, noninflammatory conditions. The early impact of vanin deficiency on tumor induction was directly correlated to the amount of inflammation and subsequent epithelial proliferation rather than cell death rate. Vanin molecule was shown to be involved in the control of thymus reconstitution following sublethal irradiation.