



Recombinant Protein Technical Manual
Recombinant Human VNN1/Vanin Protein (His Tag)
RPES2422

Product Data:

Product SKU: RPES2422

Size: 10µg

Species: Human

Expression host: Human Cells

Uniprot: O95497

Protein Information:

Molecular Mass: 53.3 kDa

AP Molecular Mass: 83 kDa

Tag: C-6His

Bio-activity:

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

Endotoxin: < 1.0 EU per µg 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 a 0.2 µm filtered solution of 20mM PB, 150mM NaCl, pH 7.2.

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

Application:

Synonyms: Pantetheinase; Pantetheine Hydrolase; Tiff66; Vascular Non-Inflammatory Molecule 1; Vanin; VNN1

Immunogen Information:

Sequence: Gln22-Ser490

Background:

Vanin is a cell membrane protein which contains one CN hydrolase domain and belongs to the CN hydrolase family and BTD/VNN subfamily. 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. Vanin is widely expressed with higher expression in spleen, kidney and blood and overexpressed in lesional psoriatic skin. 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 sub-lethal irradiation.