

Recombinant Mouse VNN1/Vanin-1 Protein (His Tag)

Catalog No. PKSM040423

Note: Centrifuge before opening to ensure complete recovery of vial contents.

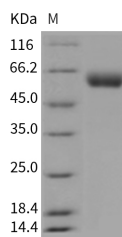
Description

Synonyms	V-1
Species	Mouse
Expression Host	HEK293 Cells
Sequence	Met 1-Ser 487
Accession	Q9Z0K8
Calculated Molecular Weight	53.4 kDa
Observed molecular weight	60 kDa
Tag	C-His
Bioactivity	Not validated for activity

Properties

Purity	> 97 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	Generally, 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 Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 97 % as determined by reducing SDS-PAGE.

Background

Pantetheinase, also known as Pantetheine hydrolase, Vascular non-inflammatory molecule 1, Vanin-1, and VNN1, is a cell membrane protein which belongs to the CN hydrolase family and BTD/VNN subfamily. Vanin-1 contains one CN

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hydrolase domain. It is widely expressed with higher expression in spleen, kidney and blood. It is overexpressed in lesional psoriatic skin. Vanin-1 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-1 is an epithelial pantetheinase that provides cysteamine to tissue and regulates response to stress. Vanin-1 is expressed by enterocytes, and its absence limits intestinal epithelial cell production of proinflammatory signals. Vanin-1 regulates late adhesion steps of thymus homing under physiological, noninflammatory conditions. The early impact of vanin-1 deficiency on tumor induction was directly correlated to the amount of inflammation and subsequent epithelial proliferation rather than cell death rate. Vanin-1 molecule was shown to be involved in the control of thymus reconstitution following sublethal irradiation.