

## 32-5228: Recombinant Human Vanin

**Alternative Name** Vanin 1, Vascular Non-Inflammatory Molecule 1, Pantetheine Hydrolase, EC 3.5.1.92, Vanin-1, HDLCQ8, Tiff66, Pantetheinase, Vannin 1, EC 3.5.1, VNN1.

### Description

Source : Escherichia Coli. VNN1 Human Recombinant produced in E.Coli is a single, non-glycosylated, polypeptide chain (Gln22-Gly491) containing 480 amino acids including a 6 aa His tag at C-terminus. The total predicted molecular mass is 53.5kDa, but it migrates as an approximately 70-80kDa. Vanin 1 (VNN1) belongs to the vanin family of proteins, which share extensive sequence similarity with each other, and also with biotinidase. This family includes secreted and membrane-associated proteins, a few of which have been described to participate in hematopoietic cell trafficking. No biotinidase activity has been established for any of the vanin proteins; nevertheless, they possess pantetheinase activity, which may have a role in oxidative-stress response. VNN1 protein, like its mouse homolog, is probably a GPI-anchored cell surface molecule. The mouse VNN1 protein is expressed by the perivascular thymic stromal cells and regulates migration of T-cell progenitors to the thymus. VNN1 is an amidohydrolase which hydrolyzes specifically one of the carboamide linkages in D-pantetheine thus recycling pantothenic acid (vitamin B5) and releasing cysteamine.

### Product Info

<b>Amount :</b>	10 µg
<b>Purification :</b>	Greater than 95% as determined by reduced SDS-PAGE.
<b>Content :</b>	VNN1 was filtered (0.2µm) and lyophilized in 20mM PB buffer, 150mM NaCl pH 7.2.
<b>Storage condition :</b>	Store lyophilized protein at <-20°C. Aliquot the product after reconstitution to avoid repeated freezing/thawing cycles. Reconstituted protein can be stored at 4°C for a limited period of time (2-7 days); it does not show any change after two weeks at 4°C. Aliquots of reconstituted samples are stable at <-20°C for 3 months.
<b>Amino Acid :</b>	MKASQDTFTAAYE HAAILPNATL TPVSREEALA LMNRNLDILE GAITSAADQG AHIIVTPEDA IYGNWVNRDS LYPYLEDIPD PEVNWIPCNN RNRFGQTPVQ ERLSCLAKNN SIYVVANIGD KKPCDTS DPQ CPPDGRYQYN TDVVFDSQ GK LVARYHKQNL FMGENQFNVP KEPEIVTFNT TFGSFGIFTC FDILFHDP AV TLVKDFHVDT IVFPTAWMN V LPHLSAVEFH SAWAMGMRVN FLASNIHYP S KKMTGSGIYA PNSSRAFHYD MKTEEGKLLL SQLD SHPSHS AVVNWTSYAS SIEALSSGNK EFKGTVFFDE FTFVKLTGVA GNYTVCQKDL CCHLSYKMSE NIPNEVYALG AFDGLHTVEG RYYLQICTLL KCKTTNLN TC GDSAETASTR FEMFSLSGTF GTQYVFPEVL LSENQLAPGE FQVSTDGRLF SLKPTSGPVL TVTLFGRLYE KDWASNASSVDHHHHHHH.

### Application Note

Always centrifuge tube before opening. DO NOT mix by vortexing or pipetting. It is not recommended to reconstitute to a concentration less than 0.1mg/ml. Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

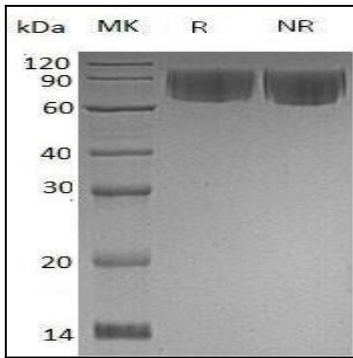


Fig. 1: 2 $\mu$ g of protein was loaded per well on a 15% SDS-PAGE gel. R is in reducing conditions, NR is for non-reducing.