

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

Amount :	10 µg
Purification :	Greater than 95% as determined by reduced SDS-PAGE.
Content :	VNN1 was filtered (0.2µm) and lyophilized in 20mM PB buffer, 150mM NaCl pH 7.2.
Storage condition :	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.
Amino Acid :	MKASQDTFTAAYE HAAILPNATL TPVSREEALA LMNRNLDILE GAITSAADQG AHIIVTPEDA IYGNWVNRDS LYPYLEDIPD PEVNWIPCNN RNRFGQTPVQ ERLSCLAKNN SIYVVANIGD KKPCDTSDPQ CPPDGRYQYN TDVVFDSQ GK LVARYHKQNL FMGENQFNVP KEPEIVTFNT TFGSFGIFTC FDILFHDPV TLVKDFHVDT IVFPTAWMNV LPHLSAVEFH SAWAMGMRVN FLASNIHYPY KKMTGSGIYA PNSSRAFHYD MKTEEGKLLL SQLD SHPSHS AVVNWTSYAS SIEALSSGNK EFKGTVFFDE FTFVKLTGVA GNYTVCQKDL CCHLSYKMSE NIPNEVYALG AFDGLHTVEG RYYLQICTLL KCKTTNLNLC GDSAETASTR FEMFSLSGTF GTQYVFPEVL LSENQLAPGE FQVSTDGRLF SLKPTSGPVL TVTLFGRLYE KDWASNASSVDHHHHHH.

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.

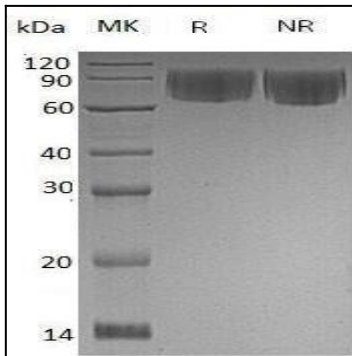


Fig. 1: 2 μ g of protein was loaded per well on a 15% SDS-PAGE gel. R is in reducing conditions, NR is for non-reducing.