

VLK recombinant protein

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CATALOG #
AAA72915

HOST
Sf9 insect cells

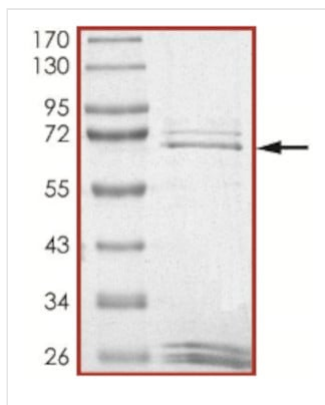
PRODUCT SYNONYMS

VLK; VLK recombinant protein; SGK493; PKDCC

PRODUCT SPECIFICATIONS

Host	Sf9 insect cells
Purity/Purification	~75%
Form/Format	Recombinant protein stored in 50 mM Tris-HCl, pH 7.5, 150 mM NaCl, 10 mM glutathione, 0.1 mM EDTA, 0.25 mM DTT, 0.1 mM PMSF, 25% glycerol
Concentration	0.05 ug/ul (varies by lot)
Sequence Length	2517
Type	Recombinant Fusion Protein
Species	Human
Tag Information	GST tag
Expression System	Sf9 insect cells using baculovirus
Source Note	Recombinant human VLK (129-end) was expressed by baculovirus in Sf9 insect cells
Dry Ice Note	The product may be shipped with dry ice, and an additional fee may be added to your shipping cost.
Preparation and Storage	Store product at -70 degree C. For optimal storage, aliquot target into smaller quantities after centrifugation and store at recommended temperature. For most favorable performance, avoid repeated handling and multiple freeze/thaw cycles.

IMAGES



Application Data

The purity of VLK was determined to be ~75% by densitometry. Approx MW 69 kDa

ADDITIONAL INFORMATION

Related Product Information for VLK recombinant protein	Recombinant human VLK (129-end) was expressed by baculovirus in Sf9 insect cells using an N-terminal GST tag. Scientific Background: VLK or vertebrate lonesome kinase is a protein kinase which is first expressed in E-cadherin-positive anterior visceral endoderm and mesendoderm, and later its expression is confined to E-cadherin-negative mesenchyme. VLK regulates the rate of protein export from the Golgi and thereby plays an important role in the formation of functional stroma by mesenchymal cells (1). Targeted disruption of VLK leads to a defect in lung development and delayed ossification of endochondral bone. VLK deficient mice display neonatal lethality due to respiratory failure, with a suckling defect arising from a cleft palate. VLK is required for the appropriate timing of flat proliferative chondrocyte differentiation (2).
Product Categories/Family for VLK recombinant protein	Cellular Proteins; Signaling Proteins - Cellular Proteins
References	1. Kinoshita. et.al: The novel protein kinase Vlk is essential for stromal function of mesenchymal cells.Development 136: 2069-2079, 2009. 2. Imuta, Y. et al: Short limbs, cleft palate, and delayed formation of flat proliferative chondrocytes in mice with targeted disruption of a putative protein kinase gene, Pkdcc (AW548124). Dev Dyn. 2009 Jan;238(1):210-22.

NCBI AND UNIPROT INFORMATION

NCBI GI #	208431816
NCBI GeneID	91461
NCBI Accession #	NP_612379.2
NCBI GenBank Nucleotide #	NM_138370
UniProt Accession #	Q504Y2; Q96I09; D6W5A0
Molecular Weight	~69 kDa
NCBI Official Full Name	Homo sapiens protein kinase domain containing, cytoplasmic (PKDCC), mRNA
NCBI Official Synonym Full Names	protein kinase domain containing, cytoplasmic
NCBI Official Symbol	PKDCC
NCBI Official Synonym Symbols	Vlk; SGK493
NCBI Protein Information	protein kinase domain-containing protein, cytoplasmic; sugen kinase 493; vertebrate lonesome kinase; protein kinase-like protein Sgk493; protein kinase domain containing, cytoplasmic homolog
UniProt Protein Name	Protein kinase domain-containing protein, cytoplasmic
UniProt Gene Name	PKDCC
UniProt Synonym Gene Names	SGK493; VLK
UniProt Entry Name	PKDCC_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.