

## 32-7242: Recombinant Human Vinculin

 Gene :
 VCL

 Gene ID :
 7414

 Uniprot ID :
 P18206

## Description

Source: E.coli.

MW :117kD.

Recombinant Human Vinculin is produced by our E.coli expression system and the target gene encoding Pro2-Gln1066 is expressed. Vinculin is a focal adhesion and cytoskeletal protein that distributed mainly at cell-cell junctions and cell-extracellular matrix (ECM) adhesion that belongs to the Vinculin/a-Catenin family. Vinculin is an Actin-binding protein and component of the Actin-Linking Functional module that senses and feels the mechanical properties of the extracellular environment. Vinculin is also a key factor that couples, transmits, transduces, and regulates mechanical force between the cytoskeleton and adhesion receptors. Vinculin generally forms two structural states, an open (active) and closed (inactive) state, which are controlled by conformational interaction(s) between the head and tail domains. Vinculin is involved in the mechano-chemical signal transmission of cells by binding to a variety of focal adhesion or cytoskeletal proteins, and plays important roles in cell adhesion, extension, motion, proliferation and survival.

## **Product Info**

Amount :	10 μg / 50 μg
Content :	Lyophilized from a 0.2 $\mu$ m filtered solution of 20mM PB, 150mM NaCl, pH 7.2.
Storage condition :	Lyophilized protein should be stored at -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at -20°C for 3 months.
Amino Acid :	PVFHTRTIESILEPVAQQISHLVIMHEEGEVDGKAIPDLTAPVAAVQAAVSNLVRVGKETVQTTEDQILKRDMPP AFIKVENACTKLVQAAQMLQSDPYSVPARDYLIDGSRGILSGTSDLLLTFDEAEVRKIIRVCKGILEYLTVAEVVET MEDLVTYTKNLGPGMTKMAKMIDERQQELTHQEHRVMLVNSMNTVKELLPVLISAMKIFVTTKNSKNQGIEEAL KNRNFTLEKMSAEINEIIRVLQLTSWDEDAWASKDTEAMKRALASIDSKLNQAKGWLRDPSASPGDAGEQAIR QILDEAGKVGELCAGKERREILGTCKMLGQMTDQVADLRARGQGSSPVAMQKAQQVSQGLDVLTAKVENAA RKLEAMTNSKQSIAKKIDAAQNWLADPNGGPEGEEQIRGALAEARKIAELCDDPKERDDILRSLGEISALTSKLA DLRRQGKGDSPEARALAKQVATALQNLQTKTNRAVANSRPAKAAVHLEGKIEQAQRWIDNPTVDDRGVGQA AIRGLVAEGHRLANVMMGPYRQDLLAKCDRVDQLTAQLADLAARGEGESPQARALASQLQDSLKDLKARMQ EAMTQEVSDVFSDTTTPIKLLAVAATAPPDAPNREEVFDERAANFENHSGKLGATAEKAAAVGTANKSTVEGIQ ASVKTARELTPQVVSAARILLRNPGNQAAYEHFETMKNQWIDNVEKMTGLVDEAIDTKSLLDASEEAIKKDLDK CKVAMANIQPQMLVAGATSIARRANRILLVAKREVENSEDPKFREAVKAASDELSKTISPMVMDAKAVAGNISD PGLQKSFLDSGYRILGAVAKVREAFQPQEPDFPPPPDLEQLRLTDELAPPKPPLPEGEVPPPRPPPEEKDEEFP EQKAGEVINQPMMMAARQLHDEARKWSSKGNDIIAAAKRMALLMAEMSRLVRGGSGTKRALIQCAKDIAKAS DEVTRLAKEVAKQCTDKRIRTNLLQVCERIPTISTQLKILSTVKATMLGRTNISDEESEQATEMLVHNAQNLMQS VKETVREAEAASIKIRTDAGFTLRWVRKTPWYQ

## **Application Note**

Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100  $\tilde{A}$   $\hat{A}\mu g/ml$ . Dissolve the lyophilized protein in ddH2O. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

**Endotoxin :** Less than 0.1 ng/Ã[]µg (1 IEU/Ã[]µg) as determined by LAL test.