

## 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 µm 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 :** PVFHTRTIESILEPVAQQISHLVIMHEEGEVDGKAIPDLTAPVAAVQAASNLVRVGKETVQTTEQILKRDMP AFIKVENACTKLQAAQMLQSDPYSPARDYLIDGSRGILSGTSDLLTFDEAEVRKIIRVCKGILEYLTVAEVVET MEDLVITYTKNLGPGMTKMAKMIDERQQELTHQEHRVMLVNSMNTVKELLPVLSAMKIFVTTKNSKNQGIEEAL KNRNFTLEKMSAEINEIRVLQLTSWDEDAWASKDTEAMKRALASIDSKLNQAKGWL RDPSPASPGDAGEQAIR QILDEAGKVGELCAGKERREILGTCKMLGQMTDQVADLRARGQGSSPVAMQKAQQVSQGLDVLTA KVENAA RKLEAMTNSKQSI AKKIDAAQNWLADPNGGPEGEEQIRGALAEARKIAELCDDPKERDDILRSLGEISALTSKLA DLRRQGGKGDSPPEARALAKQVATALQNLQTKTNRAVANSRPAKAAVHLEGKIEQAQRWIDNPTVDDRGV GQA AIRGLVAEGHRLANVMMGPYRQDLLAKCDRVDQLTAQLADLAARGEESPOARALASQLQDSLKDLKARMQ EAMTQEVSDFSDTTTPIKLLAVAATAPPDAPNREEVFDERAANFENHSGKLGATAEKAAAVGTANKSTVEG IQ ASVKTARELTPQVVSAARILLRNPGNQAAAYEHFETMKNQWIDNVEKMTGLVDEAIDTKSLLDASEEAIKKDL DK CKVAMANIQPQMLVAGATSIARRANRILLVAKREVENSEDPKFREAVKAASDELSTISPMVMDAKAVAGNIS D PGLQKSFLDSGYRILGAVAKVREAFQPQEPDFPPPPDLEQLRLTDELAPPKPLPEGEVPPRPPPPPEEKDEEFP EQKAGEVINQPMMAARQLHDEARKWSSKGNIIAAAKRMALLMAEMSRLVRGGSGTKRALIQCAKDIKAS DEVTRLAKEVAKQCTDKRIRTNLLQVCERIPTISTQLKILSTVKATMLGRNTISDEESEQATEMLVHNAQNL MQS VKETVREAEAAASIKIRTDAGFTLRWVRKTPWYQ

### 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 Åµg/ml. Dissolve the lyophilized protein in ddH<sub>2</sub>O. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

**Endotoxin :** Less than 0.1 ng/Åµg (1 IEU/Åµg) as determined by LAL test.