

## VCL polyclonal antibody

Catalog: BS1700

Host: Rabbit

Reactivity: Human

### BackGround:

Vinculin is a cytoskeletal protein that plays an important role in the regulation of focal adhesions and embryonic development. Three structural vinculin domains include an amino-terminal head, a short, flexible proline-rich region and a carboxy-terminal tail. In the inactive state, the head and tail domains of vinculin interact to form a closed conformation. The open and active form of vinculin translocates to focal adhesions where it is thought to be involved in anchoring F-actin to the membrane and regulation of cell migration. Phospholipid binding to the tail domain and subsequent phosphorylation of vinculin at Ser1033 and Ser1045 by PKC- $\alpha$  and Tyr100 and Tyr1065 by Src kinases weakens the head-tail interaction. This change in vinculin allows the binding of a number of other proteins, including talin,  $\alpha$ -actinin and paxillin, which disrupts the head-tail interaction and initiates the conformational change from the inactive to active state. Vinculin deficiencies are associated with a decrease in cell adhesion and an increase in cell motility, suggesting a possible role in metastatic growth. This is supported by a demonstrated relationship between decreased vinculin expression and increased carcinogenesis and metastasis in colorectal carcinoma.

### Product:

Rabbit IgG, 1mg/ml in PBS with 0.02% sodium azide, 50% glycerol, pH7.2.

### Molecular Weight:

~ 130kDa

### Swiss-Prot:

P18206

### Purification&Purity:

The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen and the purity is > 95% (by SDS-PAGE).

### Applications:

WB: 1:500~1:1000

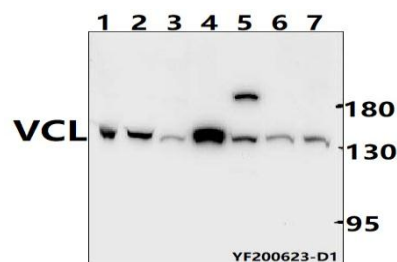
### Storage&Stability:

Store at 4 °C short term. Aliquot and store at -20 °C long term. Avoid freeze-thaw cycles.

### Specificity:

VCL polyclonal antibody detects endogenous levels of VCL protein.

### DATA:



Western blot (WB) analysis of VCL polyclonal antibody at 1:500 dilution

Lane1:MCF-7 whole cell lysate(40ug)

Lane2:CT-26 whole cell lysate(40ug)

Lane3:A549 whole cell lysate(40ug)

Lane4:H9C2 whole cell lysate(40ug)

Lane5:PC12 whole cell lysate(40ug)

Lane6:HepG2 whole cell lysate(40ug)

Lane7:Hela whole cell lysate(40ug)

### Note:

For research use only, not for use in diagnostic procedure.

### Bioworld Technology, Inc.

Add: 1660 South Highway 100, Suite 500 St. Louis Park, MN 55416, USA.

Email: [info@bioworld.com](mailto:info@bioworld.com)

Tel: 6123263284

Fax: 6122933841

### Bioworld technology, co. Ltd.

Add: No 9, weidi road Qixia District Nanjing, 210046, P. R. China.

Email: [info@biogot.com](mailto:info@biogot.com)

Tel: 0086-025-68037686

Fax: 0086-025-68035151