

## Vinculin polyclonal antibody

Catalog: BS67459      Host: Rabbit      Reactivity: Human, Mouse, Rat, Chicken, Pig

### 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:

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.

### Molecular Weight:

~ 130 kDa

### Swiss-Prot:

P18206

### Purification&Purity:

The antibody was purified by immunogen affinity chromatography.

### Applications:

WB (1/500 - 1/1000)

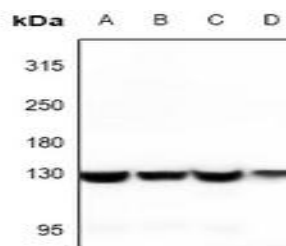
### Storage&Stability:

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

### Specificity:

Recognizes endogenous levels of Vinculin protein.

### DATA:



Western blot analysis of Vinculin expression in Hela (A), HepG2 (B), PC12 (C), mouse muscle (D) whole cell lysates.

### 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