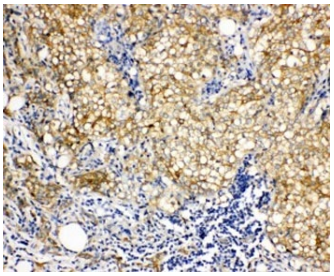
# Vinculin Antibody (R30874)

| Catalog No. | Formulation | Size |
|---|---|---|
| R30874 | 0.5mg/ml if reconstituted with 0.2ml sterile DI water | 100 ug |

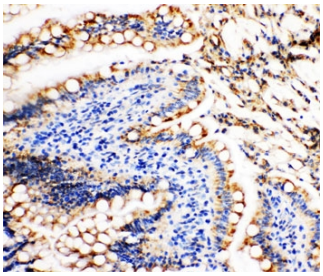
**Bulk quote request**

| | |
|---|---|
| **Availability** | 1-3 business days |
| **Species Reactivity** | Mouse |
| **Format** | Antigen affinity purified |
| **Host** | Rabbit |
| **Clonality** | Polyclonal (rabbit origin) |
| **Isotype** | Rabbit IgG |
| **Purity** | Antigen affinity |
| **Buffer** | Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide/thimerosal |
| **UniProt** | P18206 |
| **Localization** | Cytoplasmic and cell membrane |
| **Applications** | Western Blot : 0.5-1ug/ml<br>IHC (FFPE) : 0.5-1ug/ml |
| **Limitations** | This Vinculin antibody is available for research use only. |

Western blot testing of Vinculin antibody and Lane 1: rat heart; 2: (r) brain; 3: (r) liver; 4: human U87; 5: (h) SMMC-7721; 6: mouse HEPA; 7: (h) HeLa; 8: (h) HT1080 cell lysate. Predicted molecular weight ~124 kDa.



IHC-P: Vinculin antibody testing of human breast cancer tissue. Required HIER: steam section in pH6 citrate buffer for 20 min.



IHC-P: Vinculin antibody testing of rat intestine tissue. Required HIER: steam section in pH6 citrate buffer for 20 min.

## Description

In mammalian cells, Vinculin is a membrane-cytoskeletal protein in focal adhesion plaques that is involved in linkage of integrin adhesion molecules to the actin cytoskeleton. By linkage studies in a 3-generation family, Mulligan et al.(1992) mapped the VCL gene to chromosome 10q22.1-q23, distal to D10S22. It is a cytoskeletal protein associated with cell-cell and cell-matrix junctions, where it is though to function as one of several interacting proteins involved in anchoring F-actin to the membrane. Multiple alternatively-spliced transcript variants have been found for this gene, but the biological validity of some variants has not been determined. The human protein exhibits a greater-than-95% sequence identity to the chicken protein. Vinculin is a 117-kDa cytoskeletal protein with 1066 amino acids. The protein contains an acidic N-terminal domain and a basic C-terminal domain separated by a proline-rich middle segment. It has a globular head domain that contains binding sites for talin and alpha-actinin as well as a tyrosine phosphorylation site, while the tail region contains binding sites for F-actin, paxillin, and lipids.

Learn more about focal adhesion biology and vinculin research by visiting our Vinculin Antibody / Focal Adhesion Protein Antibody page.

## Application Notes

The stated application concentrations are suggested starting points. Titration of the Vinculin antibody may be required due to differences in protocols and secondary/substrate sensitivity.

## Immunogen

Amino acids 173-188 (KMIDERQQELTHQEHR) were used as the immunogen for this Vinculin antibody (100% homologous in human, mouse and rat).

## Storage

After reconstitution, the Vinculin antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.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