

DESCRIPTION

Species Reactivity	Human/Mouse/Rat
Specificity	Detects human Vinculin in direct ELISAs.
Source	Monoclonal Mouse IgG _{2B} Clone # 728513
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human Vinculin Lys1020-Gln1134 Accession # P18206
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

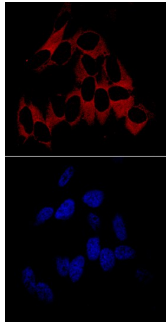
APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Immunocytochemistry	8-25 µg/mL	See Below
Immunohistochemistry	8-25 µg/mL	See Below

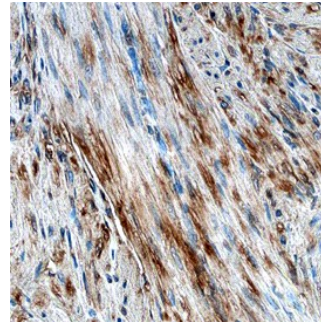
DATA

Immunocytochemistry



Vinculin in HeLa Human Cell Line. Vinculin was detected in immersion fixed HeLa human cervical epithelial carcinoma cell line using Mouse Anti-Human Vinculin Monoclonal Antibody (Catalog # MAB68961) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red, upper panel; Catalog # NL007) and counterstained with DAPI (blue, lower panel). Specific staining was localized to cytoplasm. View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

Immunohistochemistry



Vinculin in Human Uterus. Vinculin was detected in immersion fixed paraffin-embedded sections of human uterus using Mouse Anti-Human Vinculin Monoclonal Antibody (Catalog # MAB68961) at 15 µg/mL overnight at 4 °C. Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using Antigen Retrieval Reagent-Basic (Catalog # CTS013). Tissue was stained using the Anti-Mouse HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS002) and counterstained with hematoxylin (blue). Specific staining was localized to smooth muscle cells. View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.5 mg/mL.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

VCL (vinculin) is a 117 kDa actin binding cytoskeletal phosphoprotein found in adherens-type cell-cell and cell-matrix junctions. The 1066 amino acid (aa) human vinculin contains an N-terminal globular head (aa 2-835) with a talin interaction domain (aa 168-208) and three tandem repeats (aa 259-589), a pro-rich linker region (aa 826-878), and a C-terminal tail that facilitates phospholipid membrane insertion (aa 1003-1134). An 1134 aa form termed metavinculin contains 68 aa inserted after aa 915 and mainly occurs in cardiac, skeletal and smooth muscle. Human, mouse and rat vinculin share 100% aa sequence identity within the region used as an immunogen.