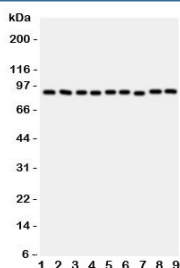


VCP Antibody (R31254)

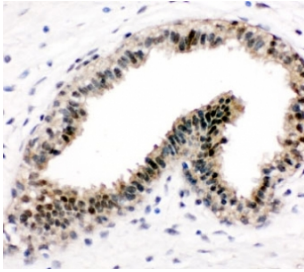
Catalog No.	Formulation	Size
R31254	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

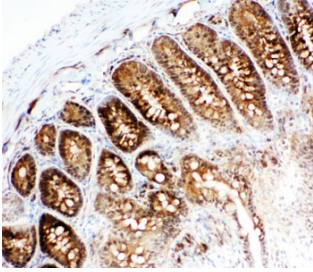
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat, Monkey
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide/thimerosal
UniProt	P55072
Applications	Western Blot : 0.5-1ug/ml Immunohistochemistry (FFPE) : 0.5-1ug/ml Immunohistochemistry (Frozen) : 0.5-1ug/ml Immunocytochemistry : 0.5-1ug/ml Immunofluorescence : 2-4ug/ml Flow Cytometry : 1-3ug/million cells
Limitations	This VCP antibody is available for research use only.



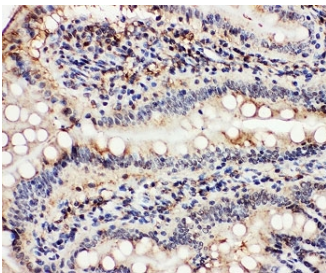
Western blot testing of VCP antibody and rat samples 1: brain; 2: kidney; 3: liver; 4: lung; and human samples 5: HeLa; 6: HL-60; 7: A431; 8: A549; 9: SMMC-7721 cell lysate. Predicted/observed molecular weight: ~89/97 kDa.



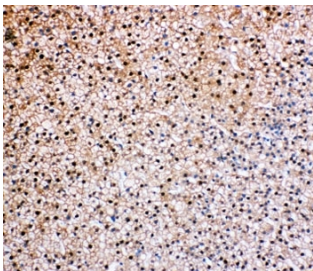
IHC-P: VCP antibody testing of human breast cancer tissue



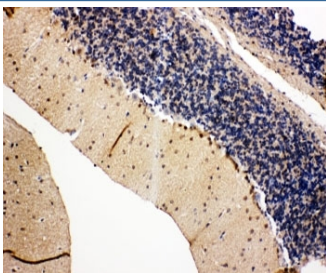
IHC-F testing of VCP antibody and rat intestine tissue



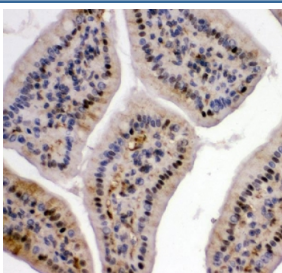
IHC-P: VCP antibody testing of rat intestine tissue



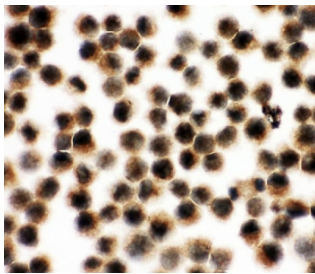
IHC-P: VCP antibody testing of rat epinephros tissue



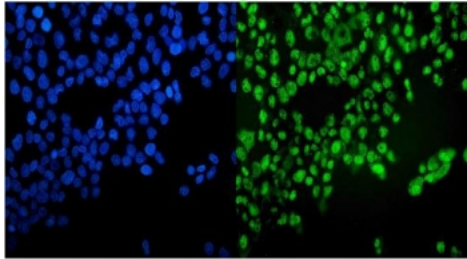
IHC-P: VCP antibody testing of rat cerebellum tissue



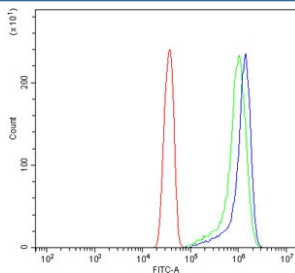
IHC-P: VCP antibody testing of mouse intestine tissue



Immunocytochemical staining of FFPE human K562 cells with VCP antibody. HIER: steam section in pH6 citrate buffer for 20 min.



Immunofluorescent staining of FFPE human A549 cells with VCP antibody (green) and DAPI nuclear stain (blue). HIER: steam section in pH6 citrate buffer for 20 min.



Flow cytometry testing of human HeLa cells with VCP antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= VCP antibody.

Description

Valosin-containing protein, also called Cdc48, is an enzyme that in humans is encoded by the VCP gene. It is a member of the AAA+(ATPase associated with various activities) protein family. The gene maps to chromosome 9p13.3. It is necessary for the fragmentation of Golgi stacks during mitosis and for their reassembly after mitosis. It is involved in the formation of the transitional endoplasmic reticulum. This gene plays a role in vesicle transport and fusion, 26S proteasome function, and assembly of peroxisomes. VCP is also involved in DNA damage response: recruited to double-strand breaks(DSBs) sites in a RNF8- and RNF168-dependent manner and promotes the recruitment of TP53BP1 at DNA damage sites.

Application Notes

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

Immunogen

An amino acid sequence from the C-terminus of human Valosin-containing protein (DNDIRKYEMFAQTLQQSR) was used as the immunogen for this VCP antibody (100% homologous in human, mouse and rat).

Storage

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

