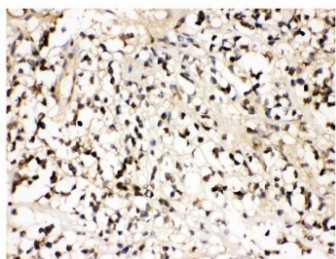


VCP Antibody / Transitional endoplasmic reticulum ATPase (R31778)

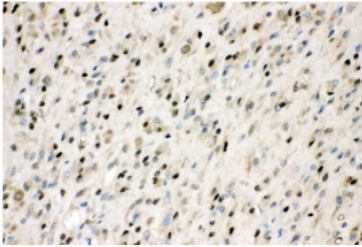
Catalog No.	Formulation	Size
R31778	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

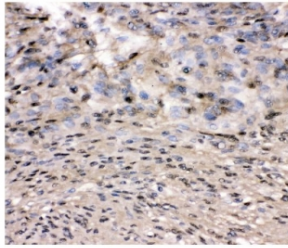
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide/thimerosal
UniProt	P55072
Localization	Nuclear, cytoplasmic
Applications	Western Blot : 0.5-1ug/ml IHC (FFPE) : 0.5-1ug/ml IHC (Frozen) : 0.5-1ug/ml Flow Cytometry : 1-3ug/million cells Immunofluorescence : 2-5ug/ml
Limitations	This VCP antibody is available for research use only.



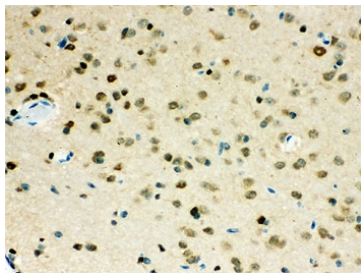
IHC staining of FFPE human glioma tissue with VCP antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



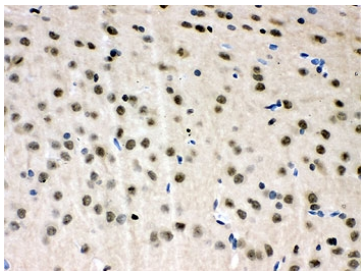
IHC staining of FFPE human glioma tissue with VCP antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



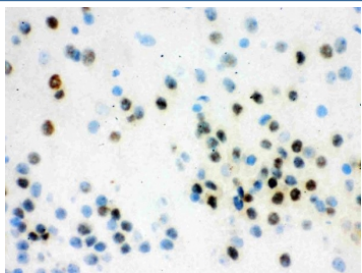
IHC staining of FFPE human meningioma tissue with VCP antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



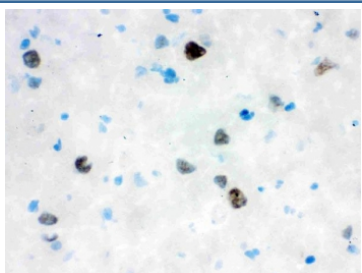
IHC staining of FFPE mouse brain tissue with VCP antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



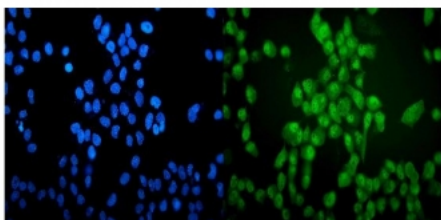
IHC staining of FFPE rat brain tissue with VCP antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



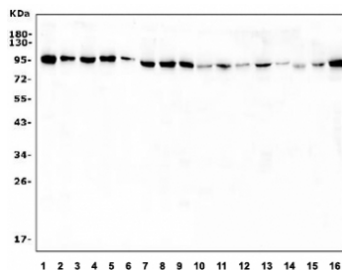
IHC staining of frozen mouse brain tissue with VCP antibody.



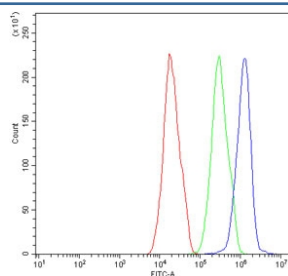
IHC staining of frozen rat brain tissue with VCP antibody.



Immunofluorescent staining of FFPE human A431 cells with VCP antibody (green) and DAPI nuclear stain (blue). HIER: steam section in pH6 citrate buffer for 20 min.



Western blot testing of human 1) HeLa, 2) A431, 3) U-87 MG, 4) A549, 5) SH-SY5Y, 6) K562, 7) Raji, 8) HepG2 and rat 9) heart, 10) spleen, 11) kidney, 12) liver and mouse 13) heart, 14) kidney, 15) liver and 16) HEPA1-6 cell lysate with VCP antibody. Predicted molecular weight ~89 kDa.



Flow cytometry testing of human HepG2 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 and Transitional endoplasmic reticulum ATPase, 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

Amino acids 732-760 (RRDHFEAMRFARRSVSDNDIRKYEMFAQ) were used as the immunogen for the 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.

