

VCP Monoclonal Antibody (5)

Product Details	
Size	100 µg
Species Reactivity	Human, Mouse, Rat
Published Species	Yeast, Mouse, Human
Host/Isotope	Mouse / IgG2a
Class	Monoclonal
Type	Antibody
Clone	5
Conjugate	Unconjugated
Immunogen	Synthetic peptide corresponding to residues C G(792) G S V Y T E D N D D D L Y G(806) of mouse VCP.
Form	Liquid
Concentration	1.0 mg/mL
Purification	Protein G
Storage buffer	PBS, pH 7.4, with 1mg/mL BSA
Contains	0.05% sodium azide
Storage Conditions	-20° C, Avoid Freeze/Thaw Cycles
RRID	AB_2214638

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	1/400	-
Immunocytochemistry (ICC)	1:20-1:200	2 Publications
Immunofluorescence (IF)	1:20-1:200	6 Publications
Immunohistochemistry (Frozen) (IHC (F))	1:500	-
Immunohistochemistry (Paraffin) (IHC (P))	1:500	1 Publication
Immunoprecipitation (IP)	Assay dependent	2 Publications
Western Blot (WB)	1:1000	13 Publications
Immunohistochemistry (IHC)	-	7 Publications

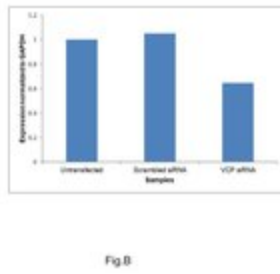
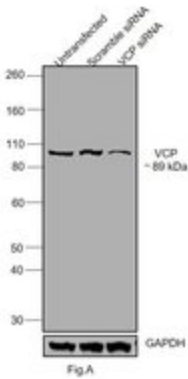
Product Specific Information

MA3-004 detects VCP protein in human, mouse, and rat samples.

MA3-004 has successfully been used in Western blot immunoprecipitation, and immunohistochemical procedures. By Western blot, this antibody detects an ~97 kDa protein representing VCP from total lysate of cultured human B cells.

The MA3-004 immunogen is a synthetic peptide corresponding to residues C G(792) G S V Y T E D N D D D L Y G(806) of mouse VCP. This peptide (Cat. # PEP-239) is available for use in neutralization and control experiments.

Advanced Verification Data



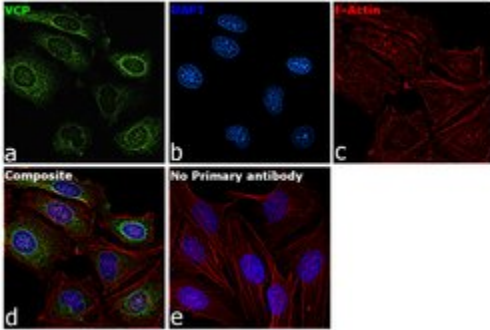
VCP Antibody (MA3-004)

Antibody specificity was demonstrated by siRNA mediated knockdown of target protein. MCF-7 cells were transfected with VCP siRNA and reduction of signal was observed in Western Blot using VCP Polyclonal Antibody (Product # MA3-004). Knockdown validation info.

Product Images For VCP Monoclonal Antibody (5)

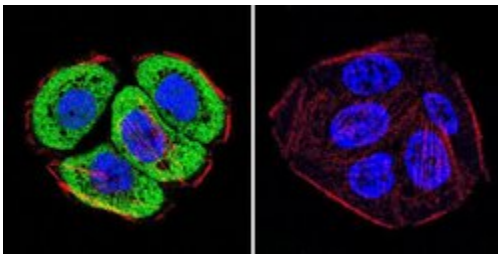
VCP Antibody (MA3-004) in IF

Immunofluorescence analysis of VCP was performed using HeLa cells. The cells were fixed and permeabilized with ice cold 100% Acetone for 5 minutes, and blocked with 2% BSA for 1 hour at room temperature. The cells were labeled with VCP Monoclonal Antibody (5) (Product # MA3-004) at 5 microgram/mL concentration in 0.1% BSA, incubated at 4 degree celsius overnight and then labeled with Goat anti-Mouse IgG (H+L) Superclonal™ Recombinant Secondary Antibody, Alexa Fluor® 488 (Product # A28175) for 45 minutes at room temperature (Panel a: green). Nuclei (Panel b: blue) were stained with ProLong™ Diamond Antifade Mountant with DAPI (Product # P36962). F-actin (Panel c: red) was stained with Rhodamine Phalloidin (Product # R415, 1:300). Panel d represents the merged image showing cytoplasmic localization. Panel e represents control cells with no primary antibody to assess background. The images were captured at 60X magnification.



VCP Antibody (MA3-004) in IF

Immunofluorescent analysis of VCP using VCP Monoclonal antibody (5) (Product # MA3-004) shows staining in WiDr colon carcinoma cells. VCP staining (green), F-Actin staining with Phalloidin (red) and nuclei with DAPI (blue) is shown. Cells were grown on chamber slides and fixed with formaldehyde prior to staining. Cells were probed without (control) or with or an antibody recognizing VCP (Product # MA3-004) at a dilution of 1:20-1:200 over night at 4°C, washed with PBS and incubated with a DyLight-488 conjugated secondary antibody (Product # 35552 for GAR, Product # 35503 for GAM). Images were taken at 60X magnification.



[View more figures on thermofisher.com](https://www.thermofisher.com)

31 References

Western Blot (13)

Parkin is a disease modifier in the mutant SOD1 mouse model of ALS.

"MA3-004 was used in Western Blotting to elucidate the potential role of Parkin as a disease modifier in amyotrophic lateral sclerosis."

Authors: Palomo GM, Granatiero V, Kawamata H, Konrad C, Kim M, Arreguin AJ, Zhao D, Milner TA, Manfredi G

Species
Mouse

Dilution
1:1000

Year
2018

Molecular neurodegeneration**Dioxins and related environmental contaminants increase TDP-43 levels.**

"MA3-004 was used in Western Blotting to suggest that environmental dioxin induced aryl hydrocarbon receptor activation increases ALS pathological protein TDP-43 concentration in human neuronal cell lines and mouse brain."

Authors: Ash PEA, Stanford EA, Al Abdulatif A, Ramirez-Cardenas A, Ballance HI, Boudeau S, Jeh A, Murithi JM, Tripodis Y, Murphy GJ, Sherr DH, Wolozin B

Species
Human

Dilution
Not Cited

Year
2017

[View more WB references on thermofisher.com](#)

Immunocytochemistry (2)**Scientific reports****UBXD1 is a mitochondrial recruitment factor for p97/VCP and promotes mitophagy.**

"Published figure using VCP monoclonal antibody (Product # MA3-004) in Immunofluorescence"

Authors: Bento AC, Bippes CC, Kohler C, Hemion C, Frank S, Neutzner A

Species
Human

Dilution
1:1,000

Year
2018

The EMBO journal**An aberrant phase transition of stress granules triggered by misfolded protein and prevented by chaperone function.**

"MA3004 was used in immunocytochemistry to characterize the components of stress granules"

Authors: Mateju D, Franzmann TM, Patel A, Kopach A, Boczek EE, Maharana S, Lee HO, Carra S, Hyman AA, Alberti S

Species
Human
Not Applicable

Dilution
Not Cited
Not Cited

Year
2017

More applications with references on thermofisher.com

IF (6) **IHC (P) (1)** **IP (2)** **IHC (7)**

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