

EZH2 Monoclonal Antibody (144CT2.1.1.5)

Catalog NumberMA5-18108

Product data sheet

Details		Species Reactivity	
Size	400 µL	Species reactivity	Human
Host/Isotope	Mouse / IgG1, kappa	Published species	Human, Not Applicable
Class	Monoclonal	Tested Applications	
Type	Antibody	ChIP assay (ChIP)	Dilution * 4 µL/10^6 cells
Clone	144CT2.1.1.5	Immunohistochemistry (Paraffin) (IHC (P))	1:25
Immunogen	EZH2 recombinant protein	Western Blot (WB)	1:2,000
Conjugate	Unconjugated	Immunocytochemistry (ICC/IF)	1:25
Form	Liquid	Published Applications	
Concentration	0.5 mg/mL	Immunocytochemistry (ICC/IF)	See 1 publications below
Purification	Protein G	* Suggested working dilutions are given as a guide only. It is recommended that the user titrate the product for use in their own experiment using appropriate negative and positive controls.	
Storage buffer	PBS		
Contains	0.09% sodium azide		
Storage Conditions	-20° C, Avoid Freeze/Thaw Cycles		

Product specific information

This antibody is predicted to react with non-human primate based on sequence homology.

Background/Target Information

EZH2 (Histone-lysine N-methyltransferase) is a member of the Polycomb-group (PcG) family. PcG family members form multimeric protein complexes, which are involved in maintaining the transcriptional repressive state of genes over successive cell generations. This protein associates with the embryonic ectoderm development protein, the VAV1 oncoprotein, and the X-linked nuclear protein. EZH2 may play a role in the hematopoietic and central nervous systems. Mutations affecting EZH2 can cause Weaver syndrome (WVS).

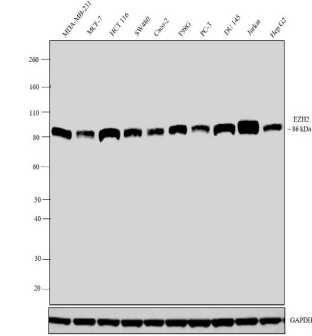
For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization.

For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization.

Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, this warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer is merely illustrative of the general type and quality of goods and does not represent that any Product will conform to such model or sample.

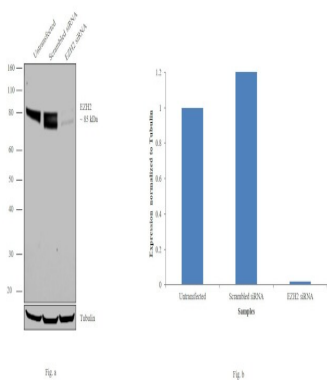
NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON-INFRINGEMENT. BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD IS LIMITED TO REPAIR, REPLACEMENT OF OR REFUND FOR THE NON-CONFORMING PRODUCT(S) AT SELLER'S SOLE OPTION. THERE IS NO OBLIGATION TO REPAIR, REPLACE OR REFUND FOR PRODUCTS AS THE RESULT OF (i) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE, (ii) MISUSE, FAULT OR NEGLIGENCE OF OR BY BUYER, (iii) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (iv) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses, or any type of consumption by or application to human or animals.

Product Images For EZH2 Monoclonal Antibody (144CT2.1.1.5)



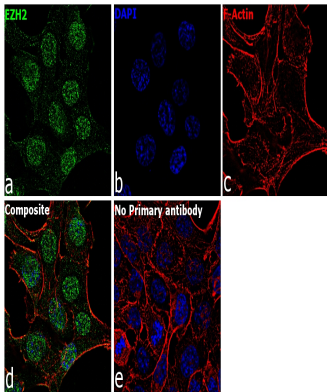
EZH2 Antibody (MA5-18108) in WB

Western blot analysis was performed on whole cell extracts (30 µg lysate) of MDA-MB-231 (Lane 1), MCF7 (Lane 2), HCT 116 (Lane 3), SW480 (Lane 4), Caco-2 (Lane 5), T98G (Lane 6), PC-3 (Lane 7), DU 145 (Lane 8), Jurkat (Lane 9) and Hep G2 (Lane 10). The blot was probed with Anti-EZH2 Monoclonal Antibody (144CT2.1.1.5) (Product # MA5-18108, 1:2000 dilution) and detected by chemiluminescence using Goat anti Mouse IgG (H+L) Superclonal™ Secondary Antibody, HRP conjugate (Product # A28177, 0.25 µg/mL, 1:4000 dilution). An 86 kDa band corresponding to EZH2 was observed across all cell lines tested.



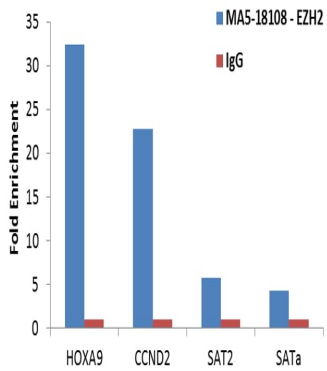
EZH2 Antibody (MA5-18108)

Antibody specificity was demonstrated by siRNA mediated knockdown of target protein. Hep G2 cells were transfected with EZH2 siRNA and reduction of signal was observed in Western Blot using EZH2 Monoclonal Antibody (144CT2.1.1.5) (Product # MA5-18108). {KD}



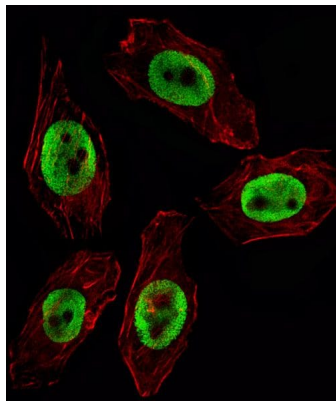
EZH2 Antibody (MA5-18108) in ICC/IF

Immunofluorescence analysis of EZH2 was performed using 70% confluent log phase HCT 116 cells. The cells were fixed with 4% paraformaldehyde for 10 minutes, permeabilized with 0.1% Triton™ X-100 for 15 minutes, and blocked with 1% BSA for 1 hour at room temperature. The cells were labeled with EZH2 Mouse Monoclonal Antibody (144CT2.1.1.5) (Product # MA5-18108) at 1: 50 dilution in 0.1% BSA, incubated at 4 degree Celsius overnight and then labeled with Goat anti-Mouse IgG (H+L) Superclonal™ Secondary Antibody, Alexa Fluor® 488 conjugate (Product # A28175) at a dilution of 1:2000 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 nucleus localization. Panel e represents control cells with no primary antibody to assess background. The images were captured at 60X magnification.



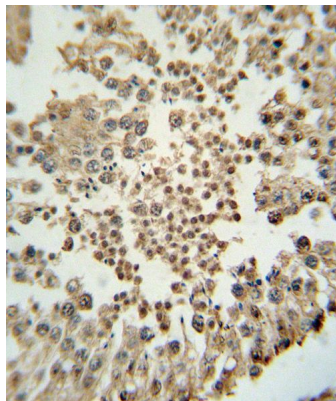
EZH2 Antibody (MA5-18108)

Antibody specificity was demonstrated by detection of enrichment of the target protein at specific gene loci. Chromatin Immunoprecipitation (ChIP) was performed using Anti-EZH2 monoclonal antibody (Product # MA5-18108) using PCR primer pairs over the promoters of HOXA9, CCND2 (positive) and SAT2 satellite repeats, SATa satellite alpha (negative). {RE}



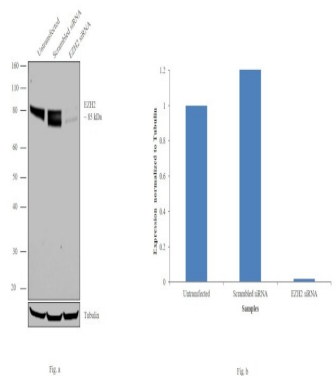
EZH2 Antibody (MA5-18108) in ICC/IF

Immunofluorescent analysis of EZH2 showing staining in the nucleus of U-251 cells using an EZH2 monoclonal antibody (Product # MA5-18108) followed by detection using a fluorescent conjugated secondary antibody (green). Cytoplasmic actin was stained with a fluorescent red phalloidin (7units/mL, 1 h at 37°C).



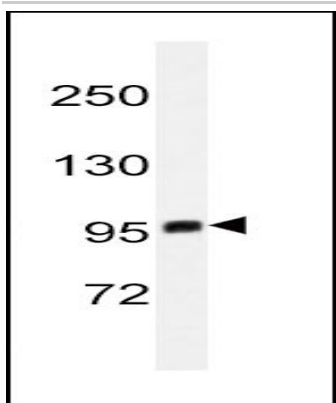
EZH2 Antibody (MA5-18108) in IHC (P)

Immunohistochemistry analysis of EZH2 in formalin-fixed, paraffin-embedded human testis tissue using an EZH2 monoclonal antibody (Product # MA5-18108) followed by peroxidase conjugation of the secondary antibody and DAB staining.



EZH2 Antibody (MA5-18108) in WB

Knockdown of EZH2 was achieved by transfecting Hep G2 cells with EZH2 specific siRNAs (Silencer® select Product # s4918, s4917). Western blot analysis (Fig. a) was performed using whole cell extracts from the EZH2 knockdown cells (lane 3), non-specific scrambled siRNA transfected cells (lane 2) and untransfected cells (lane 1). The blots were probed with EZH2 Monoclonal Antibody (144CT2.1.1.5) (Product # MA5-18108, 1:2000 dilution) and Goat anti-Mouse IgG (H+L) Superclonal™ Secondary Antibody, HRP conjugate (Product # A28177, 0.25 µg/mL, 1:4000 dilution). Densitometric analysis of this western blot is shown in histogram (Fig. b). Decrease in signal upon siRNA mediated knock down confirms that antibody is specific to EZH2.



EZH2 Antibody (MA5-18108) in WB

Western blot analysis of EZH2 in T47D cell lysate (35 µg/lane) using an EZH2 monoclonal antibody (Product # MA5-18108).

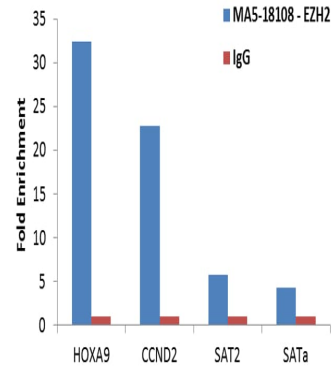
For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization.

Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, this warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer is merely illustrative of the general type and quality of goods and does not represent that any Product will conform to such model or sample.

NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON-INFRINGEMENT. BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD IS LIMITED TO REPAIR, REPLACEMENT OF OR REFUND FOR THE NON-CONFORMING PRODUCT(S) AT SELLER'S SOLE OPTION. THERE IS NO OBLIGATION TO REPAIR, REPLACE OR REFUND FOR PRODUCTS AS THE RESULT OF (i) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE, (ii) MISUSE, FAULT OR NEGLIGENCE OF OR BY BUYER, (iii) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (iv) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses, or any type of consumption by or application to human or animals.

EZH2 Antibody (MA5-18108) in ChIP

Enrichment of endogenous EZH2 protein at specific gene loci using Anti-EZH2 Antibody: Chromatin Immunoprecipitation (ChIP) was performed using Anti-EZH2 mouse monoclonal antibody (Product # MA5-18108, 8 ul) on sheared chromatin from 2 million HCT 116 cells using the MAGnify ChIP System (Product # 49-2024). Normal Rabbit IgG was used as a negative IP control. The purified DNA was analyzed by qPCR with PCR primer pairs over the promoters of HOXA9, CCND2 (positive) and SAT2 satellite repeats and SATa satellite alpha (negative). Data is presented as fold enrichment of the antibody signal versus the negative control IgG using the comparative CT method.



For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization.

Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, this warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer is merely illustrative of the general type and quality of goods and does not represent that any Product will conform to such model or sample.

NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON-INFRINGEMENT. BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD IS LIMITED TO REPAIR, REPLACEMENT OF OR REFUND FOR THE NON-CONFORMING PRODUCT(S) AT SELLER'S SOLE OPTION. THERE IS NO OBLIGATION TO REPAIR, REPLACE OR REFUND FOR PRODUCTS AS THE RESULT OF (i) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE, (ii) MISUSE, FAULT OR NEGLIGENCE OF OR BY BUYER, (iii) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (iv) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses, or any type of consumption by or application to human or animals.

PubMed References For EZH2 Monoclonal Antibody (144CT2.1.1.5)

1 Immunocytochemistry References

Species / Dilution	Summary
Human / 1:20	<p>MA5-18108 was used in Immunocytochemistry to provide a global quantitative measurement of LLPS properties of chromatin-associated proteins and higher-order chromatin structure.</p> <p>Genome biology (2021; 22:) "Quantifying the phase separation property of chromatin-associated proteins under physiological conditions using an anti-1,6-hexanediol index." Author(s):Shi M,You K,Chen T,Hou C,Liang Z,Liu M,Wang J,Wei T,Qin J,Chen Y,Zhang MQ,Li T PubMed Article URL:http://dx.doi.org/10.1186/s13059-021-02456-2</p>

For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization.

Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, this warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer is merely illustrative of the general type and quality of goods and does not represent that any Product will conform to such model or sample.

NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON-INFRINGEMENT. BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD IS LIMITED TO REPAIR, REPLACEMENT OF OR REFUND FOR THE NON-CONFORMING PRODUCT(S) AT SELLER'S SOLE OPTION. THERE IS NO OBLIGATION TO REPAIR, REPLACE OR REFUND FOR PRODUCTS AS THE RESULT OF (i) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE, (ii) MISUSE, FAULT OR NEGLIGENCE OF OR BY BUYER, (iii) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (iv) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses, or any type of consumption by or application to human or animals.