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HMGA1 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP9106b

Product Information

Application	IF, WB, FC, E
Primary Accession	P17096
Other Accession	Q8K585, P17095, Q9QXP3
Reactivity	Human, Mouse
Predicted	Hamster, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	11676
Antigen Region	64-93

Additional Information

Gene ID	3159
Other Names	High mobility group protein HMG-I/HMG-Y, HMG-I(Y), High mobility group AT-hook protein 1, High mobility group protein A1, High mobility group protein R, HMGA1, HMGIY
Target/Specificity	This HMGA1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 64-93 amino acids from the C-terminal region of human HMGA1.
Dilution	IF~~1:10~50 WB~~1:1000 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	HMGA1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	HMGA1
Synonyms	HMGIY

Function	HMG-I/Y bind preferentially to the minor groove of A+T rich regions in double-stranded DNA. It is suggested that these proteins could function in nucleosome phasing and in the 3'-end processing of mRNA transcripts. They are also involved in the transcription regulation of genes containing, or in close proximity to A+T-rich regions.
Cellular Location	Nucleus. Chromosome.

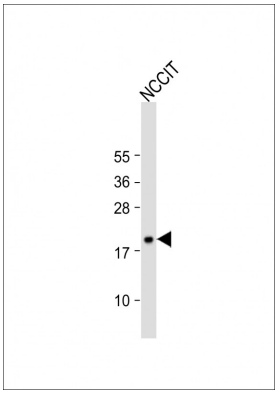
Background

HMGA1 encodes a non-histone protein involved in many cellular processes, including regulation of inducible gene transcription, integration of retroviruses into chromosomes, and the metastatic progression of cancer cells. The encoded protein preferentially binds to the minor groove of A+T-rich regions in double-stranded DNA. It has little secondary structure in solution but assumes distinct conformations when bound to substrates such as DNA or other proteins. The encoded protein is frequently acetylated and is found in the nucleus.

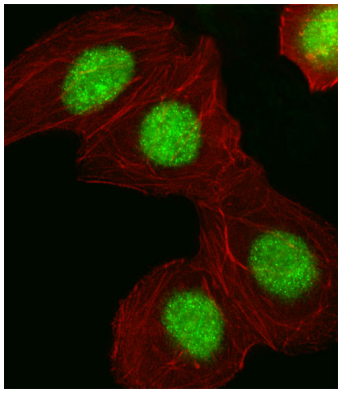
References

Mu,G., et.al., Hum. Pathol. 41 (4), 493-502 (2010)
Kim,J.J., et.al., J. Hum. Genet. 55 (1), 27-31 (2010)

Images

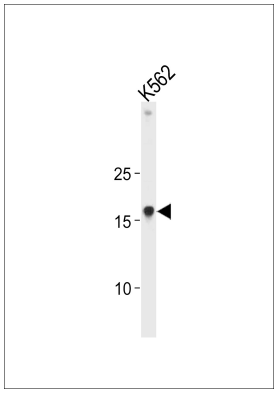


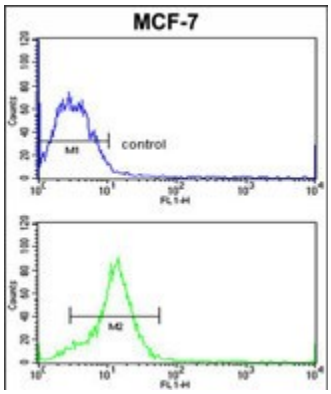
Anti-HMGA1 Antibody (C-term) at 1:1000 dilution + NCCIT whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 12 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Fluorescent image of A549 cell stained with HMGA1 Antibody (C-term)(Cat#AP9106b).A549 cells were fixed with 4% PFA (20 min), permeabilized with Triton X-100 (0.1%, 10 min), then incubated with HMGA1 primary antibody (1:25, 1 h at 37°C). For secondary antibody, Alexa Fluor® 488 conjugated donkey anti-rabbit antibody (green) was used (1:400, 50 min at 37°C).Cytoplasmic actin was counterstained with Alexa Fluor® 555 (red) conjugated Phalloidin (7units/ml, 1 h at 37°C).HMGA1 immunoreactivity is localized to Nucleus significantly.

HMGA1 Antibody (C-term) (Cat. #AP9106b) western blot analysis in K562 cell line lysates (35ug/lane).This demonstrates the HMGA1 antibody detected the HMGA1 protein (arrow).





HMGA1 Antibody (C-term) (Cat. #AP9106b) flow cytometric analysis of MCF-7 cells (bottom histogram) compared to a negative control cell (top histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

Citations

- Let-7a inhibits growth and migration of breast cancer cells by targeting HMGA1.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.