10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

HMGB3 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP14662c

Product Information

Application	WB, E
Primary Accession	O15347
Other Accession	O54879, P40618, Q32L31, NP_005333.2
Reactivity	Human
Predicted	Bovine, Chicken, Mouse, Rat, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB34279
Calculated MW	22980
Antigen Region	50-79

Additional Information

Gene ID	3149
Other Names	High mobility group protein B3, High mobility group protein 2a, HMG-2a, High mobility group protein 4, HMG-4, HMGB3, HMG2A, HMG4
Target/Specificity	This HMGB3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 50-79 amino acids from the Central region of human HMGB3.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
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	HMGB3 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	HMGB3
Synonyms	HMG2A, HMG4

Function	Multifunctional protein with various roles in different cellular compartments. May act in a redox sensitive manner. Associates with chromatin and binds DNA with a preference for non-canonical DNA structures such as single-stranded DNA. Can bend DNA and enhance DNA flexibility by looping thus providing a mechanism to promote activities on various gene promoters (By similarity). Proposed to be involved in the innate immune response to nucleic acids by acting as a cytoplasmic promiscuous immunogenic DNA/RNA sensor (By similarity). Negatively regulates B-cell and myeloid cell differentiation. In hematopoietic stem cells may regulate the balance between self-renewal and differentiation. Involved in negative regulation of canonical Wnt signaling (By similarity).
Cellular Location	Nucleus {ECO:0000250|UniProtKB:P40618, ECO:0000255|PROSITE-ProRule:PRU00267}. Chromosome Cytoplasm {ECO:0000250|UniProtKB:O54879}
Tissue Location	Expressed predominantly in placenta.

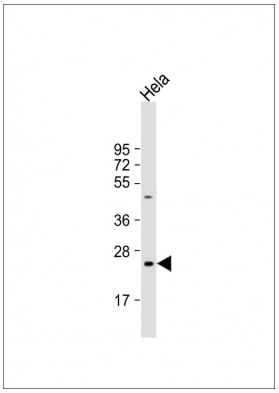
Background

HMGB3 belongs to the high mobility group (HMG) protein superfamily. Like HMG1 (MIM 163905) and HMG2 (MIM 163906), HMGB3 contains DNA-binding HMG box domains and is classified into the HMG box subfamily. Members of the HMG box subfamily are thought to play a fundamental role in DNA replication, nucleosome assembly and transcription (Wilke et al., 1997 [PubMed 9370291]; Nemeth et al., 2006 [PubMed 16945912]).

References

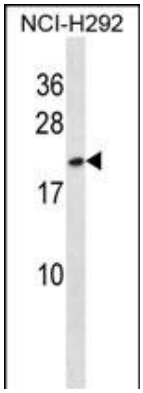
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Ross, M.T., et al. Nature 434(7031):325-337(2005)
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Davis, D.L., et al. Gene 113(2):251-256(1992)

Images



Anti-HMGB3 Antibody (Center) at 1:1000 dilution + Hela 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 : 23 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

HMGB3 Antibody (Center) (Cat. #AP14662c) western blot analysis in NCI-H292 cell line lysates (35ug/lane).This demonstrates the HMGB3 antibody detected the HMGB3 protein (arrow).



Citations

- CircRNA_102179 promotes the proliferation, migration and invasion in non-small cell lung cancer cells by regulating miR-330-5p/HMGB3 axis

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