

**HMGB3 Antibody (Center)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP14662c****Specification**

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**HMGB3 Antibody (Center) - Product Information**

Application	WB,E
Primary Accession	<a href="#">O15347</a>
Other Accession	<a href="#">O54879</a> , <a href="#">P40618</a> , <a href="#">Q32L31</a> , <a href="#">NP_005333.2</a>
Reactivity	Human
Predicted	Bovine, Chicken, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	22980
Antigen Region	50-79

**HMGB3 Antibody (Center) - 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

**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.

**HMGB3 Antibody (Center) - 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 Chromosome {ECO:0000250|UniProtKB:O54879}

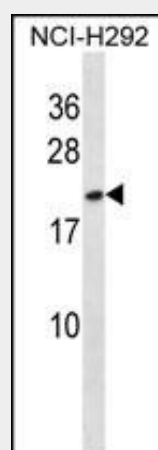
**Tissue Location**

Expressed predominantly in placenta.

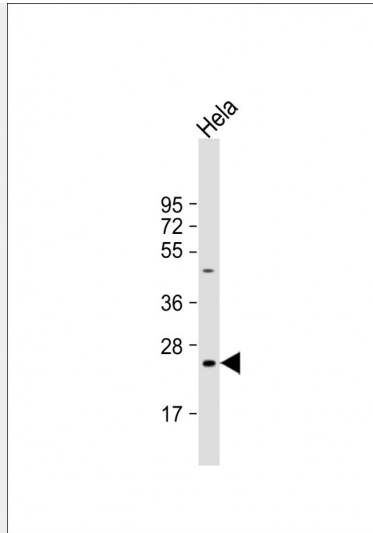
**HMGB3 Antibody (Center) - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**HMGB3 Antibody (Center) - Images**

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).



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) - 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]).

### **HMGB3 Antibody (Center) - References**

Nemeth, M.J., et al. Proc. Natl. Acad. Sci. U.S.A. 103(37):13783-13788(2006)  
Ross, M.T., et al. Nature 434(7031):325-337(2005)  
Vaccari, T., et al. Genomics 49(2):247-252(1998)  
Wilke, K., et al. Gene 198 (1-2), 269-274 (1997) :  
Davis, D.L., et al. Gene 113(2):251-256(1992)

### **HMGB3 Antibody (Center) - Citations**

- [CircRNA\\_102179 promotes the proliferation, migration and invasion in non-small cell lung cancer cells by regulating miR-330-5p/HMGB3 axis.](#)