

**Anti-HMG4 Picoband Antibody**  
Catalog # ABO12319**Specification****Anti-HMG4 Picoband Antibody - Product Information**

Application	WB, IHC
Primary Accession	<a href="#">O15347</a>
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

**Description**

Rabbit IgG polyclonal antibody for High mobility group protein B3(HMGB3) detection. Tested with WB, IHC-P in Human;Mouse;Rat.

**Reconstitution**

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

**Anti-HMG4 Picoband Antibody - 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

**Calculated MW**

22980 MW KDa

**Application Details**

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Mouse, Rat, By Heat  
Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat

**Subcellular Localization**

Nucleus . Chromosome . Cytoplasm .

**Tissue Specificity**

Expressed predominantly in placenta.

**Protein Name**

High mobility group protein B3

**Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg Na<sub>3</sub>.

**Immunogen**

A synthetic peptide corresponding to a sequence at the N-terminus of human HMG4 (62-95aa EMAKADKVRDREMKDYGPAKGGKKKKDPNAPKR), identical to the related mouse and rat sequences.

### Purification

Immunogen affinity purified.

### Cross Reactivity

No cross reactivity with other proteins

### Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.

## Anti-HMG4 Picoband Antibody - 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

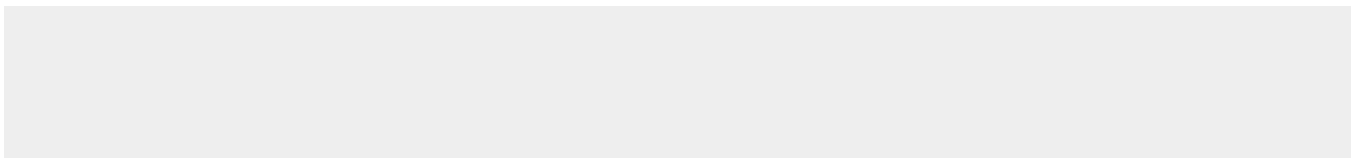
Expressed predominantly in placenta.

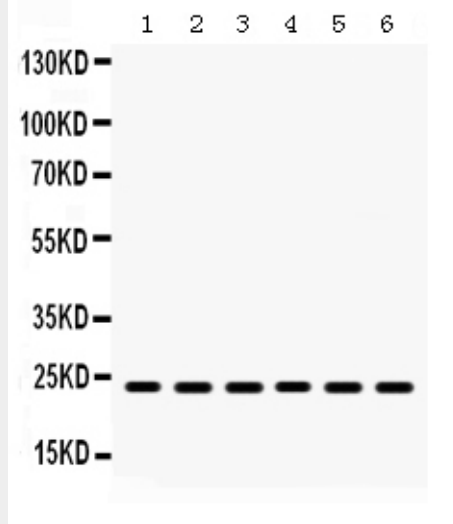
## Anti-HMG4 Picoband Antibody - Protocols

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

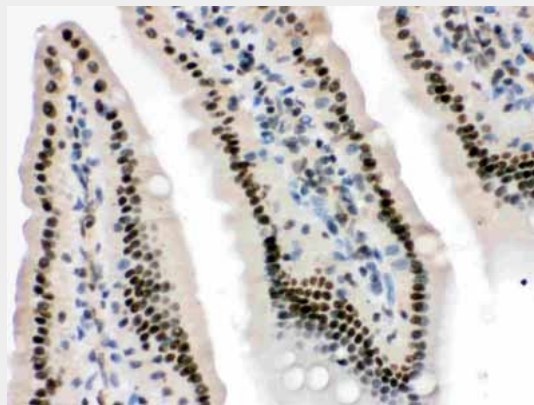
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## Anti-HMG4 Picoband Antibody - Images

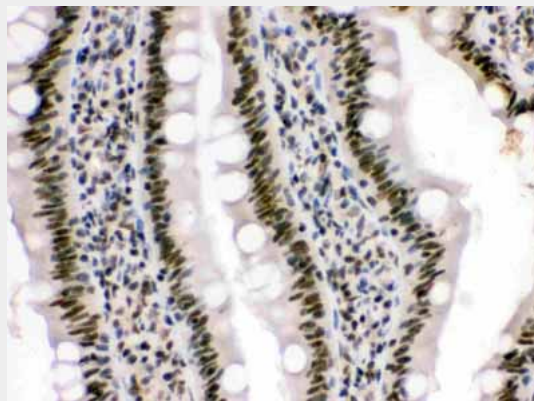




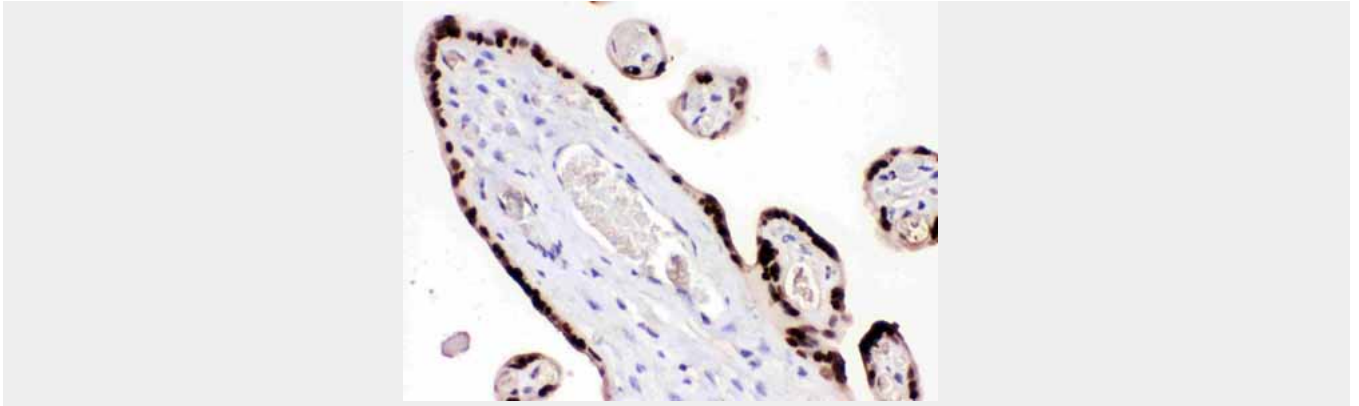
Anti- HMG4 Picoband antibody, ABO12319, Western blotting All lanes: Anti HMG4 (ABO12319) at 0.5ug/ml  
 Lane 1: Mouse Liver Tissue Lysate at 50ug  
 Lane 2: Mouse Kidney Tissue Lysate at 50ug  
 Lane 3: Mouse Testis Tissue Lysate at 50ug  
 Lane 4: 22RV1 Whole Cell Lysate at 40ug  
 Lane 5: MCF-7 Whole Cell Lysate at 40ug  
 Lane 6: NIH3T3 Whole Cell Lysate at 40ug  
 Predicted bind size: 23KD  
 Observed bind size: 23KD



Anti- HMG4 Picoband antibody, ABO12319, IHC(P) IHC(P): Mouse Intestine Tissue



Anti- HMG4 Picoband antibody, ABO12319, IHC(P) IHC(P): Rat Intestine Tissue



Anti- HMG4 Picoband antibody, ABO12319, IHC(P)IHC(P): Human Placenta Tissue

#### **Anti-HMG4 Picoband Antibody - Background**

High-mobility group protein B, also known as HMG4, is a protein that in humans is encoded by the HMGB3 gene. This gene encodes a member of a family of proteins containing one or more high mobility group DNA-binding motifs. The encoded protein plays an important role in maintaining stem cell populations, and may be aberrantly expressed in tumor cells. A mutation in this gene was associated with microphthalmia, syndromic 13. There are numerous pseudogenes of this gene on multiple chromosomes. Alternative splicing results in multiple transcript variants.