

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

Anti-HMG4 Picoband Antibody - Product Information

Application	WB, IHC-P
Primary Accession	O15347
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 Na₂HPO₄, 0.05mg Na₃.

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 reconstitution, 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}

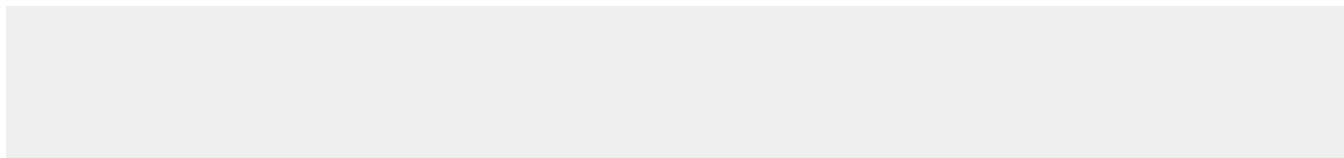
Tissue Location

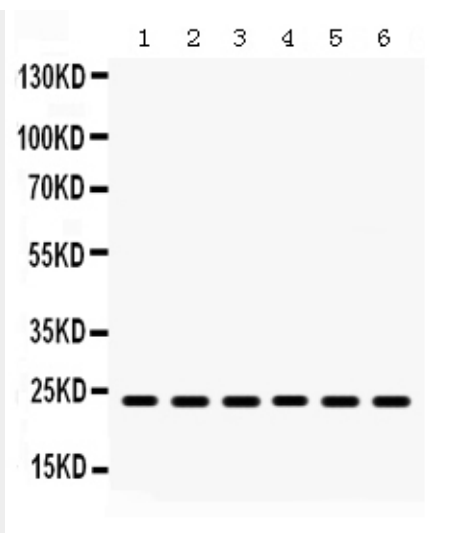
Expressed predominantly in placenta.

Anti-HMG4 Picoband Antibody - Protocols

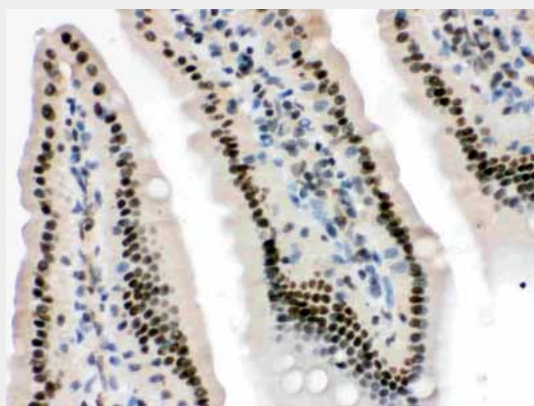
Provided below are standard protocols that you may find useful for product applications.

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

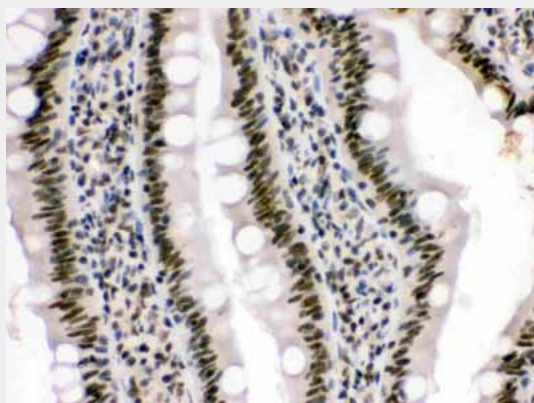
Anti-HMG4 Picoband Antibody - Images



Anti- HMG4 Picoband antibody, ABO12319, Western blottingAll lanes: Anti HMG4 (ABO12319) at 0.5ug/mlLane 1: Mouse Liver Tissue Lysate at 50ugLane 2: Mouse Kidney Tissue Lysate at 50ugLane 3: Mouse Testis Tissue Lysate at 50ugLane 4: 22RV1 Whole Cell Lysate at 40ugLane 5: MCF-7 Whole Cell Lysate at 40ugLane 6: NIH3T3 Whole Cell Lysate at 40ugPredicted bind size: 23KDObserved 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.