

Anti-HMG4 Picoband Antibody
Catalog # ABO12319

Specification

Anti-HMG4 Picoband Antibody - Product Information

Application	WB, IHC
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 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}

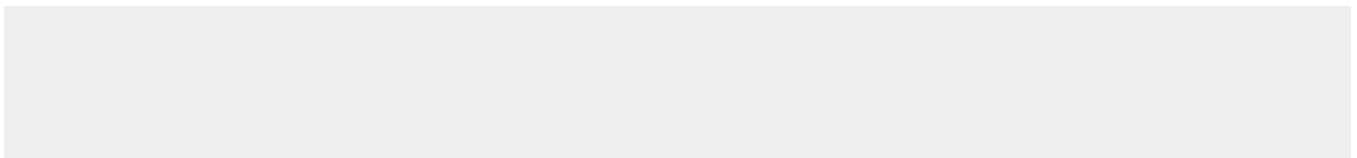
Tissue Location

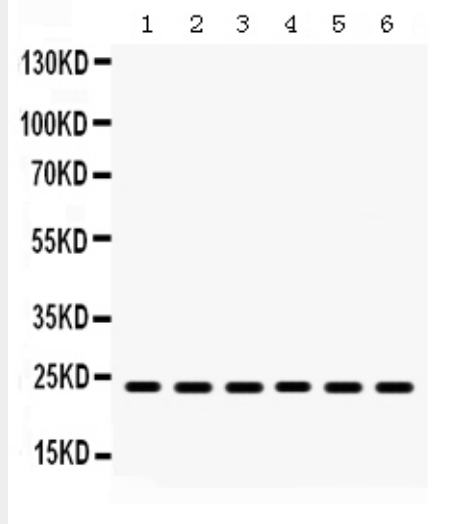
Expressed predominantly in placenta.

Anti-HMG4 Picoband Antibody - Protocols

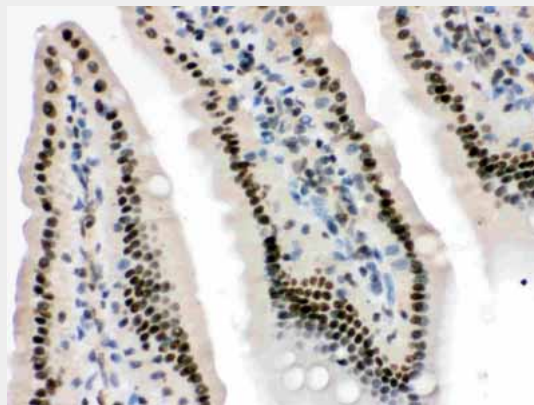
Provided below are standard protocols that you may find useful for product applications.

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

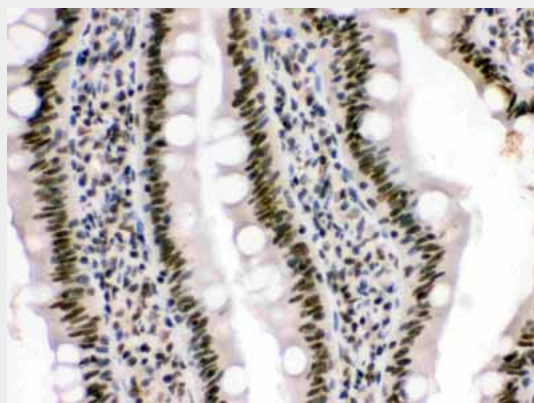
Anti-HMG4 Picoband Antibody - Images



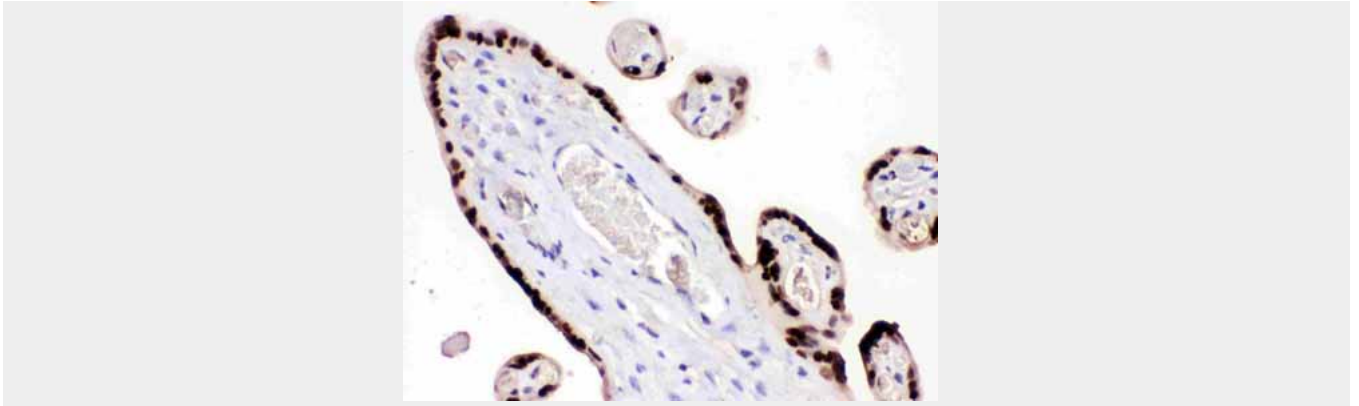
Anti- HMG4 Picoband antibody, ABO12319, Western blotting All lanes: Anti HMG4 (ABO12319) at 0.5ug/ml
 Lane 1: Mouse Liver Tissue Lysate at 50ug
 Lane 2: Mouse Kidney Tissue Lysate at 50ug
 Lane 3: Mouse Testis Tissue Lysate at 50ug
 Lane 4: 22RV1 Whole Cell Lysate at 40ug
 Lane 5: MCF-7 Whole Cell Lysate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