

### **Anti-MNAT1 Picoband Antibody**

**Catalog # ABO12300** 

# **Specification**

## **Anti-MNAT1 Picoband Antibody - Product Information**

Application WB, IHC
Primary Accession P51948
Host Rabbit

Reactivity Human, Mouse, Rat

Clonality Polyclonal Lyophilized

**Description** 

#### Reconstitution

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

# **Anti-MNAT1 Picoband Antibody - Additional Information**

### **Gene ID 4331**

#### **Other Names**

CDK-activating kinase assembly factor MAT1, CDK7/cyclin-H assembly factor, Cyclin-G1-interacting protein, Menage a trois, RING finger protein 66, RING finger protein MAT1, p35, p36, MNAT1, CAP35, MAT1, RNF66

### **Calculated MW**

35823 MW KDa

### **Application Details**

Immunohistochemistry(Paraffin-embedded Section), 0.5-1  $\mu$ g/ml, Human, Mouse, Rat, By Heat<br/>br>Western blot, 0.1-0.5  $\mu$ g/ml, Human, Rat<br/>br>

## **Subcellular Localization**

Nucleus.

# **Tissue Specificity**

Highest levels in colon and testis. Moderate levels are present thymus, prostate, ovary, and small intestine. The lowest levels are found in spleen and leukocytes.

### **Protein Name**

CDK-activating kinase assembly factor MAT1

### **Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

## **Immunogen**

E.coli-derived human MNAT1 recombinant protein (Position: L92-A278). Human MNAT1 shares 93%



amino acid (aa) sequence identity with mouse MNAT1.

#### **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.

**Sequence Similarities** 

Contains 1 RING-type zinc finger.

# **Anti-MNAT1 Picoband Antibody - Protein Information**

Name MNAT1

Synonyms CAP35, MAT1, RNF66

### **Function**

Stabilizes the cyclin H-CDK7 complex to form a functional CDK-activating kinase (CAK) enzymatic complex. CAK activates the cyclin-associated kinases CDK1, CDK2, CDK4 and CDK6 by threonine phosphorylation. CAK complexed to the core-TFIIH basal transcription factor activates RNA polymerase II by serine phosphorylation of the repetitive C-terminal domain (CTD) of its large subunit (POLR2A), allowing its escape from the promoter and elongation of the transcripts. Involved in cell cycle control and in RNA transcription by RNA polymerase II.

#### **Cellular Location**

Nucleus.

#### **Tissue Location**

Highest levels in colon and testis. Moderate levels are present thymus, prostate, ovary, and small intestine. The lowest levels are found in spleen and leukocytes

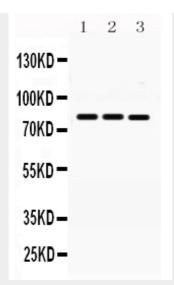
### **Anti-MNAT1 Picoband Antibody - Protocols**

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

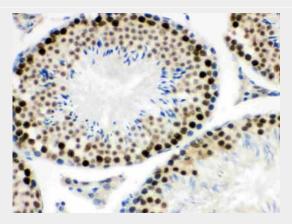
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## **Anti-MNAT1 Picoband Antibody - Images**

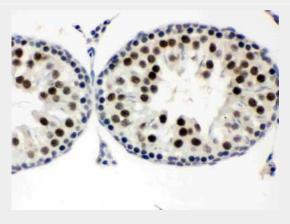




Anti- MNAT1 Picoband antibody, ABO12300, Western blottingAll lanes: Anti MNAT1 (ABO12300) at 0.5ug/mlLane 1: Rat Brain Tissue Lysate at 50ugLane 2: Rat Liver Tissue Lysate at 50ugLane 3: MCF-7 Whole Cell Lysate at 40ugLane 4: HELA Whole Cell Lysate at 40ugPredicted bind size: 81KDObserved bind size: 81KD

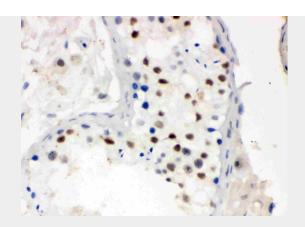


Anti- MNAT1 Picoband antibody, ABO12300, IHC(P)IHC(P): Mouse Testis Tissue



Anti- MNAT1 Picoband antibody, ABO12300, IHC(P)IHC(P): Rat Testis Tissue





Anti- MNAT1 Picoband antibody, ABO12300, IHC(P)IHC(P): Human Testis Tissue

# **Anti-MNAT1 Picoband Antibody - Background**

CDK-activating kinase assembly factor MAT1 is an enzyme that in humans is encoded by the MNAT1 gene. The protein encoded by this gene, along with cyclin H and CDK7, forms the CDK-activating kinase (CAK) enzymatic complex. This complex activates several cyclin-associated kinases and can also associate with TFIIH to activate transcription by RNA polymerase II. Two transcript variants encoding different isoforms have been found for this gene.