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Anti-MNAT1 Picoband Antibody

Catalog # ABO12300

Product Information

Application	WB, IHC-P
Primary Accession	P51948
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for CDK-activating kinase assembly factor MAT1(MNAT1) detection. Tested with WB, IHC-P in Human;Mouse;Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

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
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 □g/ml, Human, Mouse, Rat, By Heat Western blot, 0.1-0.5 □g/ml, Human, Rat
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.
Source	Eukaryota
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.

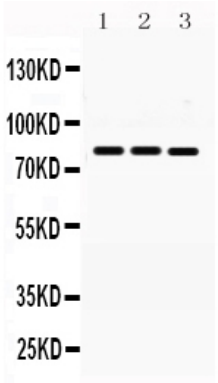
Protein Information

Name	MNAT1
Synonyms	CAP35, MAT1, RNF66
Function	Component of the CDK-activating kinase (CAK) complex, a master regulator of CDK activity by catalyzing the activating threonine phosphorylation of CDKs (PubMed:41100585). Binds and activates CDK7, the catalytic subunit of CAK (PubMed:41100585). CAK activates major mediators of cell cycle control, including CDK1, CDK2, CDK4 and CDK6, and plays a key role in regulating cell cycle progression (PubMed:41100585). 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 (PubMed:10024882). Involved in cell cycle control and in RNA transcription by RNA polymerase II (PubMed:10024882).
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

Background

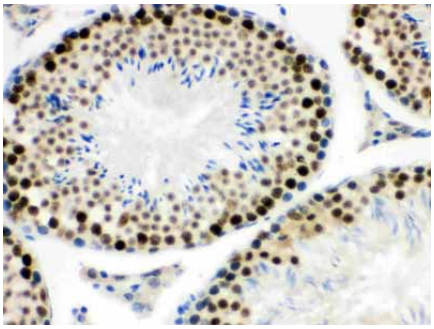
CDK-activating kinase assembly factor MAT1 is an enzyme that in humans is encoded by the MNAT1 gene. The protein encoded by this gene, along with cyclin H and CDK7, forms the CDK-activating kinase (CAK) enzymatic complex. This complex activates several cyclin-associated kinases and can also associate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

Images

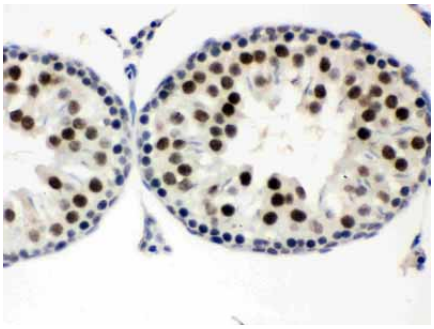


Anti- MNAT1 Picoband antibody, ABO12300, Western blottingAll lanes: Anti MNAT1 (ABO12300) at 0.5ug/mlLane 1: Rat Brain Tissue Lysate at 50ugLane 2: Rat Liver Tissue Lysate at 50ugLane 3: MCF-7 Whole Cell Lysate at 40ugLane 4: HELA Whole Cell Lysate at 40ugPredicted bind size: 81KDObserved bind size: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

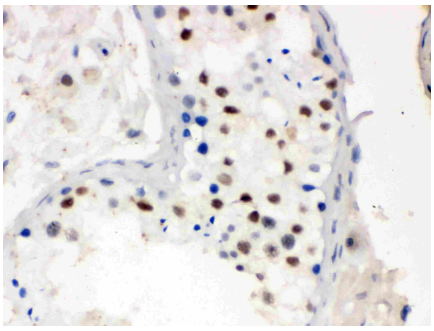
Anti- MNAT1 Picoband antibody, ABO12300, IHC(P)IHC(P):



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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.