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MNAT1 Rabbit pAb

Catalog # AP99875

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	P51948
Other Accession	P51948
Reactivity	Rat, Mouse
Predicted	Pig, Human, Rabbit, Chicken, Dog, Horse, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	35823
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human MNAT1
Epitope Specificity	51-150/309
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Contains 1 RING-type zinc finger. Contains 1 UIM (ubiquitin-interacting motif) repeat.
SUBUNIT	Associates primarily with CDK7 and cyclin H to form the CAK complex. CAK can further associate with the core-TFIIH to form the TFIIH basal transcription factor.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	MNAT1 (or 'menage a trois-1') is a subunit of the CAK complex which is a multisubunit protein that includes CDK7, cyclin H, as well as MNAT1. CAK (CDK-activating kinase) phosphorylates and thus activates CDKS (Cyclin-dependent kinases) which play an essential role in cell cycle control of eukaryotic cells.

Additional Information

Gene ID	4331
Other Names	CAP35; MAT1; RNF66; TFB3; E130115E11Rik; P36; MAT1_HUMAN; MNAT1; CDK7/cyclin-H assembly factor; Cyclin-G1-interacting protein; Menage a trois; RING finger protein 66; RING finger protein MAT1; p35; MAT1_MOUSE; MNAT1 component of CDK activating kinase; menage a trois 1 (CAK assembly factor); menage a trois homolog 1, cyclin H assembly factor (Xenopus laevis); MNAT CDK-activating kinase assembly factor 1; MNAT1, CDK activating kinase assembly factor; CDK-activating kinase assembly factor
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,Flow-Cyt=2ug /Test
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When

reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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

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