10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

# MAT1 Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP50692

## Product Information

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| **Application** | WB |
| **Primary Accession** | P51948 |
| **Reactivity** | Human, Mouse, Rat |
| **Host** | Rabbit |
| **Clonality** | polyclonal |
| **Calculated MW** | 35823 |

## Additional Information

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| **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 |
| **Dilution** | WB~~1:1000 |
| **Format** | Rabbit IgG in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.09% (W/V) sodium azide and 50% glycerol. |
| **Storage Conditions** | -20℃ |

## Protein Information

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| **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. |

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| **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 |

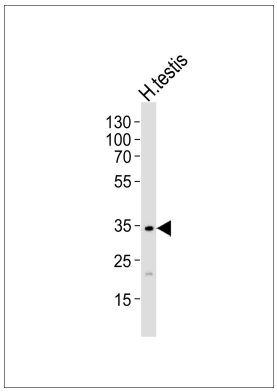
## Background

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-terminus 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.

## References


Tassan J.-P.,et al.EMBO J. 14:5608-5617(1995).
Yee A.,et al.Cancer Res. 55:6058-6062(1995).
Xu F.,et al.Submitted (JUN-1996) to the EMBL/GenBank/DDBJ databases.
Ebert L.,et al.Submitted (MAY-2004) to the EMBL/GenBank/DDBJ databases.
Heilig R.,et al.Nature 421:601-607(2003).


## Images




Western blot analysis of lysate from human testis tissue lysate,using MAT1 Antibody(AP50692). AP50692 was diluted at 1:1000. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody.Lysate at 35ug.


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