

Product datasheet for **AP06703PU-M**

MNAT1 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	Western blot: 1/500-1/1000. Immunohistochemistry on paraffin sections: 1/50-1/200.
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Synthetic peptide, corresponding to amino acids 100-150 of Human MNAT1.
Specificity:	This antibody detects endogenous levels of Mat1 protein. (region surrounding Glu123)
Formulation:	Phosphate buffered saline (PBS), pH 7.2. State: Aff - Purified State: Liquid purified Ig fraction Preservative: 0.05% sodium azide
Concentration:	1.0 mg/ml
Purification:	Affinity-chromatography using epitope-specific immunogen and the purity is > 95% (by SDS-PAGE)
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	~ 36 kDa
Gene Name:	MNAT1, CDK activating kinase assembly factor
Database Link:	Entrez Gene 4331 Human P51948

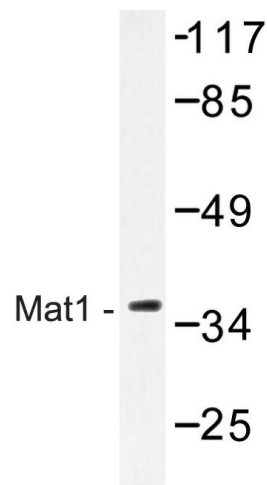
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Background:

Progression through the cell cycle requires activation of a series of enzymes designated cyclin dependent kinases (Cdks). The monomeric catalytic subunit, Cdk2, a critical enzyme for initiation of cell cycle progression, is completely inactive. Partial activation is achieved by the binding of regulatory cyclins such as cyclin D1, while full activation requires phosphorylation at Thr 160. The enzyme responsible for phosphorylation of Thr 160 in Cdk2 and also Thr 161 in Cdc2 p34, designated Cdk-activating kinase (CAK), has been partially purified and shown to be comprised of a catalytic subunit, a regulatory subunit and a subunit of unknown function. The regulatory subunit is a novel cyclin (cyclin H) and is required for activation of Cdk7. This previously undescribed protein, now termed Mat1 p36, has been cloned as a protein that associates with the cyclin H/Cdk7 nuclear complex at all stages of the cell cycle. Cyclin H/Cdk7/Mat1 p36 complexes display kinase activity towards Cdk activation domains, and the carboxy terminus of RNA polymerase II. Mat1 p36 appears to constitute the first example of an assembly factor, essential for the formation of an active Cdk/cyclin complex.

Synonyms:

RING finger protein MAT1, RING finger protein 66, Menage a trois, CAP35, MAT1

Product images:


Western blot (WB) analysis of Mat1 antibody in extracts from HeLa cells.