Bioworld Technology CO., Ltd.



MNAT1 (E123) Peptide

Cat No.: BS2011P

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.

Swiss-Prot

P51948

Applications

Blocking

Specificity

This peptide can be used with studies using BS2011 MNAT1 (E123) pAb.

Purification & Purity

Synthetic peptide MNAT1 (E123). (Note: the amino acid sequence is proprietary). The purity is > 98%.

Product

1 mg/ml in DI water.

Storage & Stability

Store at $4 \,^{\circ}{\rm C}$ short term. Aliquot and store at $-20 \,^{\circ}{\rm C}$ long term. Avoid freeze-thaw cycles.

Research Use

For research use only, not for use in diagnostic procedure.