

## **Product datasheet for TA389101**

## **CDK1 Mouse Antibody [Clone ID: M226]**

**Product data:** 

**Product Type:** Primary Antibodies

Clone Name: M226

**Applications:** ICC, IHC, IP, WB

Recommended Dilution: WB: 1:1000

**ICC**: 1:100

**Reactivity:** Human, Rat, Mouse

Host: Mouse Isotype: IgG1

Immunogen: Clone M226 was generated from a recombinant human Cdk1 protein that included amino

acids residues in the N-terminal region. This sequence is conserved in human and rat Cdk1,

and has low homology to other Cdk family members.

**Specificity:** The antibody detects a 34 kDa\* band corresponding to Cdk1 on SDS-PAGE immunoblots of

human SYF and HeLa cells. The antibody does not detect other Cdk family members, such as

Cdk2 and Cdk5.

Formulation: PBS + 1 mg/ml BSA, 0.05% NaN3 and 50% glycerol

**Concentration:** lot specific

Purification: Protein A Purified

Conjugation: Unconjugated

Storage: Storage at -20°C is recommended, as aliquots may be taken without freeze/thawing due to

presence of 50% glycerol. Stable for at least 1 year at -20°C.

**Stability:** After date of receipt, stable for at least 1 year at -20°C.

Predicted Protein Size: 34

Database Link: P06493



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Background:

Cyclin-dependent kinases (Cdks) are a family of serine/threonine kinases that require association with regulatory subunits known as cyclins for activation. In addition, post-translational phosphorylation and dephosphorylation events regulate Cdk activity. Phosphorylation of Thr-160 in the T loop by Cdk-activating kinase (CAK) is an obligatory step in kinase activation. By contrast, phosphorylation of the Thr-14 and Tyr-15 residues by the Wee1 family of dual specificity kinases is inhibitory for the Cdks, and dephosphorylation of these residues by the Cdc25 family of phosphatases coincides with Cdk activation. Alternatively, Cdk5 appears to require different mechanisms for activation. This Cdk is activated through association with specific activators, including p35, p39, and p67. Cdk5 is primarily activated in neuronal cells, and only c-Abl kinase, rather than Wee family members, have been shown to phosphorylate Tyr-15 to regulate its activity.

Note:

Protein G purified tissue culture supernatant.