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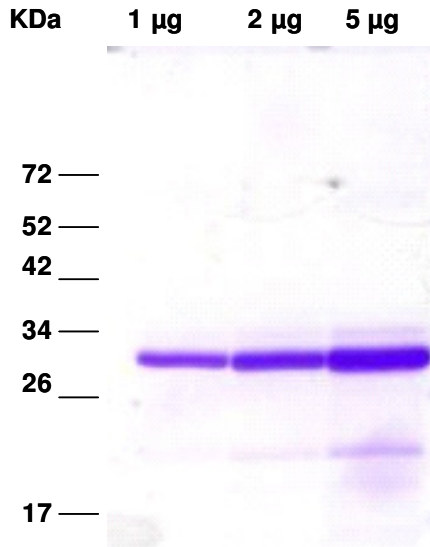
## Certificate of Analysis

<b>Product</b>	<b>p27</b> <b>human recombinant, expressed in E. coli, N-His-fusion protein</b>
Cat No	P-002-01
Lot No	241110
<b>Description</b>	Purified human recombinant p27, expressed in E. coli with a N-terminal His-tag. Purified by Ni-agarose chromatography. Sequence based calculated M.W. 23.685,93 Approved HUGO gene symbol: CDKN1B Synonyms: KIP1, p27KIP1, cyclin-dependent kinase inhibitor 1B (p27, Kip1)
<b>Quality</b>	Protein concentration 1 mg/ml (Bradford with BSA as standard) Purity >90 % by SDS PAGE Protease activity none (Twining test)  Inhibition of CDK2 was demonstrated by a CDK2/CycE activity assay using histone H1 as substrate.
<b>Form</b>	Liquid. In 100 mM Tris-HCl, 200 mM NaCl, 2 mM $\beta$ -glycerophosphate, 2 mM DTT, pH 8.5
<b>Package size</b>	100 $\mu$ g
<b>Storage condition</b>	-70 °C
<b>Shipment conditions</b>	dry ice

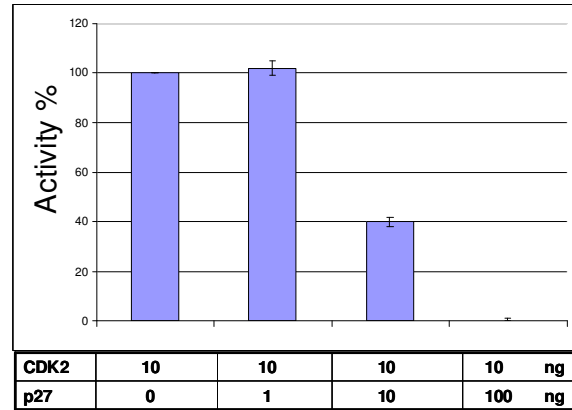
*Material for in vitro research use only. Not for pharmaceutical or drug application. Material does not contain any animal products such as albumin.*

**AVOID FREEZE/THAW CYCLES**

## SDS-PAGE analysis



## CDK2 inhibition by increasing amounts of p27



## Amino acid sequence information

M14 corresponds to M1 of NM\_004064

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MGSSHHHHHH S QDPMSNVRV SNGSPSLERM DARQAEHPKP SACRNLFGPV 50
DHEELTRDLE KHCRDMEEAS QRKWNFDFQN HKPLEGKYEW QEVEKGS LPE 100
FYRPPRPPK GACKVPAQES QDVSGSRPAA PLIGAPANSE DTHLVDPKTD 150
PSDSQTGLAE QCAGIRKRPA TDDSSTQNKR ANRTEENVSD GSPNAGSVEQ 200
TPKKPGLRRR QT 212
    
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## References

Isabel M. Chu, Ludger Hengst & Joyce M. Slingerland. The Cdk inhibitor p27 in human cancer: prognostic potential and relevance to anticancer therapy  
Nature Reviews Cancer 2008 Apr; 8:253-267.

Matsuda Y. Molecular mechanism underlying the functional loss of cyclindependent kinase inhibitors p16 and p27 in hepatocellular carcinoma.  
World J Gastroenterol. 2008 Mar 21;14(11):1734-40.

Alkarain A, Jordan R, Slingerland J. p27 deregulation in breast cancer: prognostic significance and implications for therapy.  
J Mammary Gland Biol Neoplasia. 2004 Jan; 9(1):67-80.

Hauck L, Harms C, An J, Rohne J, Gertz K, Dietz R, Enders M, von Harsdorf R. Protein kinase CK2 links extracellular growth factor signaling with the control of p27 (Kip1) stability in the heart.  
Nat Med. 2008 Mar;14(3):315-24.