

35-1687: Polyclonal Antibody to CDK4

Clonality :	Polyclonal
Application :	WB,IHC
Reactivity :	Human
Gene :	CDK4
Gene ID :	1019
Uniprot ID :	P11802
Format :	Purified
Alternative Name :	PSK-J3, CMM3, CMM3
Isotype :	Rabbit IgG
Immunogen Information :	Peptide sequence around aa.295~299(L-H-K-D-E)derived from Human CDK4.

Description

Cyclin-dependent kinase activity is regulated by T-loop phosphorylation (Thr172 in the case of CDK4), by the abundance of their cyclin partners, and by association with CDK inhibitors of the Cip/Kip or INK family of proteins . The inactive ternary complex of CDK4/cyclin D and p27 Kip1/Cip1 requires extracellular mitogenic stimuli for the release and degradation of p27, which affects progression through the restriction point and pRb-dependent entry into S-phase . The active complex of CDK4/cyclin D targets the retinoblastoma protein for phosphorylation, allowing the release of E2F transcription factors that activate G1/S-phase gene expression . In HeLa cells, upon UV irradiation, upregulation of p16 INK4A association with CDK4/cyclin D3 leads to a G2 delay, implicating CDK4/cyclin D3 activity in progression through the G2-phase of the cell cycle . Hirai, H. et al. (1995) Mol. Cell. Biol. 15, 2672-2681. Sherr, C.J. (1996) Science 274, 1672-1677. Lukas, J. et al. (1996) Mol. Cell. Biol. 16, 6917-6925. Gabrielli, B.G. et al. (1999) J Biol Chem 274, 13961-9.

Product Info

Amount :	50 µl / 100 µl
Content :	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg ²⁺ and Ca ²⁺), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage condition :	Store the antibody at 4°C, stable for 6 months. For long-term storage, store at -20°C. Avoid repeated freeze and thaw cycles.

Application Note

Predicted MW: 34kd, Western blotting: 1:500~1:1000, Immunohistochemistry:1:50~1:100

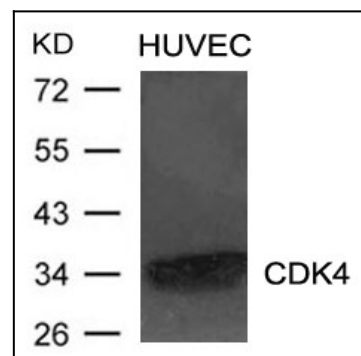


Figure 1: Western blot analysis of extracts from HUVEC cells using CDK4 Antibody 35-1687 .

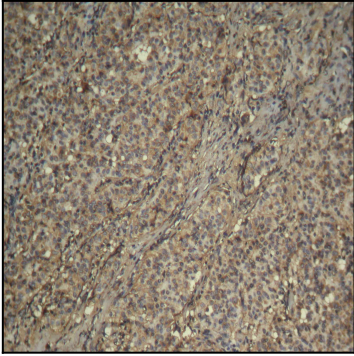


Figure 2: Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using CDK4 Antibody 35-1687 .