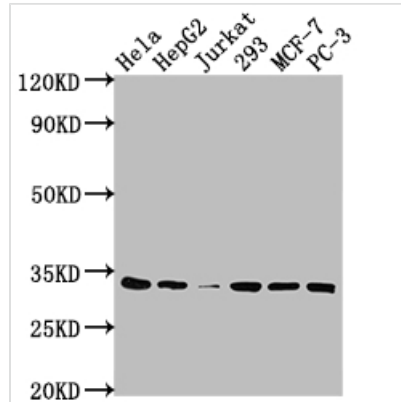




CDK4 Antibody

Product Code	CSB-RA965615A0HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P11802
Immunogen	A synthesized peptide derived from human CDK4
Species Reactivity	Human
Tested Applications	ELISA, WB, IP; Recommended dilution: WB:1:500-1:5000, IP:1:200-1:1000
Relevance	<p>Ser/Thr-kinase component of cyclin D-CDK4 (DC) complexes that phosphorylate and inhibit members of the retinoblastoma (RB) protein family including RB1 and regulate the cell-cycle during G(1)/S transition. Phosphorylation of RB1 allows dissociation of the transcription factor E2F from the RB/E2F complexes and the subsequent transcription of E2F target genes which are responsible for the progression through the G(1) phase. Hypophosphorylates RB1 in early G(1) phase. Cyclin D-CDK4 complexes are major integrators of various mitogenic and antimitogenic signals. Also phosphorylates SMAD3 in a cell-cycle-dependent manner and represses its transcriptional activity. Component of the ternary complex, cyclin D/CDK4/CDKN1B, required for nuclear translocation and activity of the cyclin D-CDK4 complex.</p>
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	Affinity-chromatography
Isotype	Rabbit IgG
Clonality	Monoclonal
Product Type	Recombinant Antibody
Immunogen Species	Homo sapiens (Human)
Research Area	Isotype/Loading Controls; Epigenetics and Nuclear Signaling; Cancer; Cell biology
Gene Names	CDK4
Accession NO.	8F2
Image	


Western Blot

Positive WB detected in: HeLa whole cell lysate, HepG2 whole cell lysate, Jurkat whole cell lysate, 293 whole cell lysate, MCF-7 whole cell lysate, PC-3 whole cell lysate

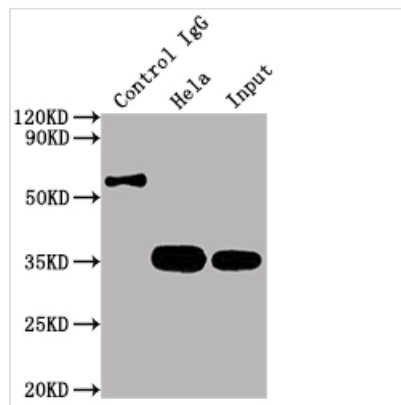
All lanes: CDK4 antibody at 1:2000

Secondary

Goat polyclonal to rabbit IgG at 1/50000 dilution

Predicted band size: 34, 21 kDa

Observed band size: 34 kDa



Immunoprecipitating CDK4 in HeLa whole cell lysate

Lane 1: Rabbit control IgG instead of CSB-RA965615A0HU in HeLa whole cell lysate. For western blotting, a HRP-conjugated Protein G antibody was used as the secondary antibody (1/1500)

Lane 2: CSB-RA965615A0HU(2µg)+ HeLa whole cell lysate(500µg)

Lane 3: HeLa whole cell lysate (10µg)

Description

CDK4 is a serine/threonine kinase that regulates the orderly progression of the cell cycle by binding to CDK6 and cyclin D and phosphorylating RB to promote the progression through the G1/S transition. CDK4 and CDK6 contribute to driving the transition from the G1 to S phase during the cell cycle, which is important for mammalian cell proliferation. It is often activated in human cancers and has been regarded as an attractive target for new treatments. CDK4/6 inhibitors such as palbociclib, ribociclib, and abemaciclib block the activation of CDK4/6, leading to cell cycle arrest at the G1 phase.

Compared with the polyclonal and monoclonal antibodies of CDK4, this CDK4 recombinant antibody has the features of increased reproducibility and control, animal-free technology, high degree of monovalency, high batch-to-batch consistency, easier isotype conversion, etc. And it has been validated in ELISA, WB, IP.