

Product Name: KD-Validated Cyclin Dependent Kinase 5 Recombinant Rabbit Monoclonal Antibody

Catalog #: KVA01820

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,FCM,ICC
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Rabbit IgG
Clonality	Rabbit mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:2,000-1:10,000; FC 1:200-1:2,000; ICC 1:100-1:1,000
Molecular Weight	Calculated MW: 33.3kDa

Antigen Information

Gene Name	CDK5
Alternative Names	CDK5; CRK6; Cell division protein kinase 5; EC 2.7.11.22; PSSALRE; TAU protein kinase II catalytic subunit; TPKII catalytic subunit; Tau protein kinase II catalytic subunit; kinase Cdk5
Gene ID	1020.0
SwissProt ID	Q00535
Immunogen	A synthesized peptide derived from human Cdk5

Background

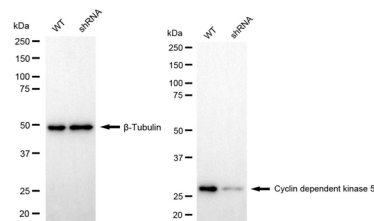
This gene encodes a proline-directed serine/threonine kinase that is a member of the cyclin-dependent kinase family of proteins. Unlike other members of the family, the protein encoded by this gene does not directly control cell cycle regulation.

Instead the protein, which is predominantly expressed at high levels in mammalian postmitotic central nervous system neurons, functions in diverse processes such as synaptic plasticity and neuronal migration through phosphorylation of proteins required for cytoskeletal organization, endocytosis and exocytosis, and apoptosis. In humans, an allelic variant of the gene that results in undetectable levels of the protein has been associated with lethal autosomal recessive lissencephaly-7. Alternative splicing results in multiple transcript variants. [provided by RefSeq, May 2015]

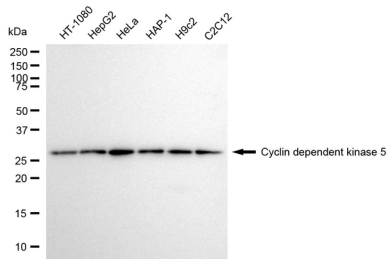
Research Area

Cell Biology, Neuroscience, Cancer, Metabolism

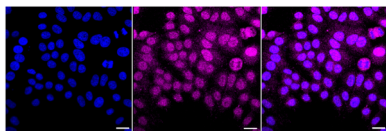
Image Data



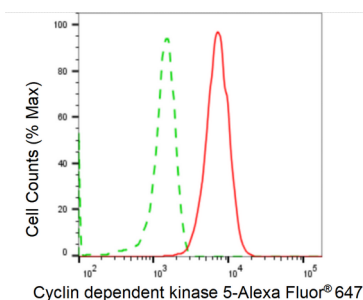
Western blotting analysis using cyclin dependent kinase 5 antibody (KVA01820). Cyclin dependent kinase 5 expression in wild type (WT) and cyclin dependent kinase 5 (CDK5) shRNA knockdown (KD) HeLa cells with 20 µg of total cell lysates. β-Tubulin serves as a loading control. The blot was incubated with cyclin dependent kinase 5 antibody (KVA01820, 1:10,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Western blotting analysis using cyclin dependent kinase 5 antibody (KVA01820). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with cyclin dependent kinase 5 antibody (KVA01820, 1:10,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Immunocytochemical staining of HepG2 cells with cyclin dependent kinase 5 antibody (KVA01820, 1:1,000). Nuclei were stained blue with DAPI; Cyclin dependent kinase 5 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Low. Scale bar: 20 µm.



Flow cytometric analysis of cyclin dependent kinase 5 expression in HepG2 cells using cyclin dependent kinase 5 antibody (KVA01820, 1:2,000). Green, isotype control; red, cyclin dependent kinase 5.