

Product Name: KD-Validated Cyclin Dependent Kinase 5 Mouse Monoclonal Antibody
Catalog #: KVA01860

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Mouse
Application	WB,FCM
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Mouse IgG1
Clonality	Mouse 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 1:500-1:2,500; FC 1:200-1:2,000
Molecular Weight	Calculated MW: 33.3kDa

Antigen Information

Gene Name	CDK5 CDK5; Cyclin Dependent Kinase 5; PSSALRE; Serine/Threonine-Protein Kinase PSSALRE; Tau Protein Kinase II Catalytic Subunit; Cell Division Protein Kinase 5; Cyclin-Dependent-Like
Alternative Names	Kinase 5; Cyclin-Dependent Kinase 5; TPKII Catalytic Subunit; Epididymis Secretory Sperm Binding Protein; Protein Kinase CDK5 Splicing; EC 2.7.11.22; EC 2.7.11.1; EC 2.7.11; CDKN5; LIS7
Gene ID	1020.0
SwissProt ID	Q00535
Immunogen	Recombinant protein of human CDK5

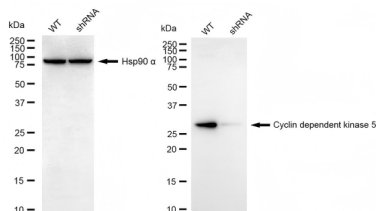
Background

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]

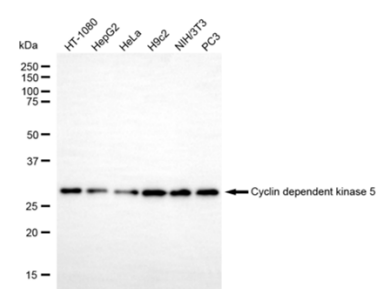
Research Area

Cancer, Cell Biology, Metabolism, Neuroscience

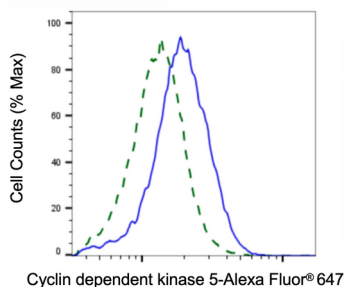
Image Data



Western blotting analysis using cyclin dependent kinase 5 antibody (KVA01860). Cyclin dependent kinase 5 expression in wild-type (WT) and cyclin dependent kinase 5 (CDK5) shRNA knockdown (KD) HeLa cells with 30 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with cyclin dependent kinase 5 antibody (KVA01860, 1:2,500) and HRP-conjugated goat anti-mouse secondary antibody (APS0631, 1:10,000) respectively.



Western blotting analysis using cyclin dependent kinase 5 antibody (KVA01860). 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 (KVA01860, 1:2,500) and HRP-conjugated goat anti-mouse secondary antibody (APS0631, 1:10,000) respectively.



Validation of Cyclin dependent kinase 5 knockdown using flow cytometry. Wild-type (WT, Blue) and knockdown (KD, Green) HeLa cells were stained with Cyclin dependent kinase 5 antibody (KVA01860, 1:2,000) and analyzed using BD flow cytometer.