



Rabbit Anti-CDKL5 antibody

SL11538R

Product Name:	CDKL5
Chinese Name:	周期素依赖性激酶样5抗体
Alias:	Cdk15; CDKL5_HUMAN; Cyclin dependent kinase 5 transcript; Cyclin-dependent kinase-like 5; EIEE2; ISSX; Serine/threonine kinase 9; Serine/threonine-protein kinase 9; Stk9.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Pig,Cow,Horse,Sheep,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	115kDa
Cellular localization:	The nucleus
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human CDKL5:401-500/1030
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	Cell cycle progression is controlled in part by a family of cyclin proteins and cyclin-dependent kinases (Cdks). Cdk proteins work in concert with the cyclins to phosphorylate key substrates involved in each phase of cell cycle progression. Another family of proteins, Cdk inhibitors, also plays a role in regulating the cell cycle by binding to cyclin-Cdk complexes and modulating their activity. CDKL5 (cyclin-

dependent kinase-like 5) is a 1030 amino acid protein that belongs to the CMGC Ser/Thr protein kinase family. Expressed in brain, lung, kidney, prostate, ovary, placenta, pancreas and testis, CDKL5 is thought to play a role in cell cycle regulation. Defects in CDKL5 are a cause of several disorders, such as X-linked infantile spasm syndrome and Rett syndrome.

Function:

Mediates phosphorylation of MECP2.

Subunit:

Interacts with MECP2.

Subcellular Location:

Nucleus.

Tissue Specificity:

Expressed in brain, lung, kidney, prostate, ovary, placenta, pancreas and testis.

Post-translational modifications:

Autophosphorylated.

DISEASE:

Note=Chromosomal aberrations involving CDKL5 are found in patients manifesting early-onset seizures and spasms and psychomotor impairment. Translocation t(X;6)(p22.3;q14); translocation t(X;7)(p22.3;p15). Defects in CDKL5 are a cause of epileptic encephalopathy early infantile type 2 (EIEE2) [MIM:300672]; also known as atypical CDKL5-related Rett syndrome. EIEE2 is a severe form of epilepsy characterized by seizures or spasms beginning in infancy. Patients manifest features resembling Rett syndrome such as microcephaly, lack of speech development, stereotypic hand movements.

Similarity:

Belongs to the protein kinase superfamily. CMGC Ser/Thr protein kinase family. CDC2/CDKX subfamily. Contains 1 protein kinase domain.

SWISS:

O76039

Gene ID:

6792

Database links:

[Entrez Gene: 6792](#)Human

[Entrez Gene: 382253](#)Mouse

[Omid: 300203](#)Human

[SwissProt: O76039](#)Human

[SwissProt: Q3UTQ8](#)Mouse

[Unigene: 659851](#)Human

[Unigene: 443717](#)Mouse

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

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