

Rabbit Anti-phospho-CDK5 (Tyr15) antibody

SL6411R

phospho-CDK5 (Tyr15)
磷酸化周期素依赖性激酶5抗体
Cdk5 (phospho Y15); p-Cdk5(Y15); Cdk 5; Cell division protein kinase 5; Crk6; Cyclin dependent kinase 5; Protein kinase CDK5 splicing; PSSALRE; Serine threonine protein kinase PSSALRE; Tau protein kinase II catalytic subunit; TPKII catalytic subunit; CDK5_HUMAN.
Specific References(1) SL6411R has been referenced in 1 publications.
[IF=3.26]Yin, Xiang, et al. "Roscovitine treatment caused impairment of fertilizing
ability in mice." Toxicology Letters (2015).IHC-P;Mouse.
<u>PubMed:26101799</u>
Rabbit
Polyclonal
Mouse,Rat,Chicken,Cow,Horse,Rabbit,
ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
32kDa
The nucleuscytoplasmicThe cell membrane
Lyophilized or Liquid
1mg/ml
KLH conjugated synthesised phosphopeptide derived from human CDK5 around the phosphorylation site of Tyr15:GT(p-Y)GT
IgG
affinity purified by Protein A
0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.

PubMed: PubMed CDK3 (Cyclin Dependent Kinase 5) is serine/threonine kinase involved in synaptic regulation and neuronal development; phosphorylates synaptic protein Pctaire1; regulates acetylcholine receptor expression. CDK5 is a member of the cyclindependent kinase family of serine/threonine kinases. It is present in numerous mammalian tissues including kidney, testes, and ovary. Its activity is detected almost exclusively in brain extracts. Neuronal and muscle cells contain the highest amount of this protein. Similar t other Cdks, monomeric Cdk5 displays no enzymatic activity, but Cdk5 is not activated by cyclins. Instead, the p35 protein, which is expressed solely in the brain, activates Cdk5. Cdk5 interacts with D1 and D3 type G1 cyclins and can phosphorylate histone H1, TAU, MAP2 and NF-H and NF-M. Cdk3 activity is involved in terminal differentiation of neurons and muscle cells. Subcellular Location: Isoform 1: Cytoplasm. Cell projection, growth cone. Cell junction, synapse, postsynaptic cell membrane; postsynaptic density. Isoform 2: Nucleus. Tissue Specificity: Isoform 1 is ubiquitously expressed. Accumulates in cortical neurons (at protein level). Isoform 2 has only been detected in testis, skeletal muscle, colon, bone marrow and ovary. Similarity: Belongs to the protein kinase superfamily. CMGC Ser/Thr protein kinase family. CDC2/CDKX subfamily. COMX subfamily. Contains 1 protein kinase domain. SWISS: Q00535 Gene 1D: 1020 Database links: Entrez Gene: 1020Human	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.
Product Detail: CDK5 (Cyclin Dependent Kinase 5) is serine/threonine kinase involved in synaptic regulation and neuronal development; phosphorylates synaptic protein Petaire 1; regulates acetylcholine receptor expression. CDK5 is a member of the cyclindependent kinase family of serine/threonine kinases. It is present in numerous mammalian tissues including kidney, testes, and ovary. Its activity is detected almost exclusively in brain extracts. Neuronal and muscle cells contain the highest amount of this protein. Similar t other Cdks, monomeric Cdk5 displays no enzymatic activity, but Cdk5 is not activated by cyclins. Instead, the p35 protein, which is expressed solely in the brain, activates Cdk5. Cdk5 interacts with D1 and D3 type G1 cyclins and can phosphorylate histone H1, TAU, MAP2 and NF-H and NF-M. Cdk5 activity is involved in terminal differentiation of neurons and muscle cells. Subcellular Location: Isoform 1: Cytoplasm. Cell membrane; Peripheral membrane protein. Perikaryon. Cell projection, lamellipodium. Cell projection, growth cone. Cell junction, synapse, postsynaptic cell membrane, postsynaptic density. Isoform 2: Nucleus. Tissue Specificity: Isoform 1 is ubiquitously expressed. Accumulates in cortical neurons (at protein level). Isoform 1 is ubiquitously expressed. Accumulates, colon, bone marrow and ovary. Similarity: Belongs to the protein kinase superfamily. CMGC Ser/Thr protein kinase family. CDC2/CDKX subfamily. Contains 1 protein kinase domain. SWISS: Q00535 Gene ID: 1020 Database links: Entrez Gene: 1020Human<	PubMed:	PubMed
Entrez Gene: 140908Rat Omim: 123831Human		CDK5 (Cyclin Dependent Kinase 5) is serinc/threonine kinase involved in synaptic regulation and neuronal development; phosphorylates synaptic protein Petiare1; regulates acetyleholine receptor expression. CDK5 is a member of the cyclindependent kinase family of serine/threonine kinases. It is present in numerous mammalian tissues including kidney, testes, and ovary. Its activity is detected almost exclusively in brain extracts. Neuronal and muscle cells contain the highest amount of this protein. Similar to other Cdks, monomeric Cdk5 displays no enzymatic activity, but Cdk5 is not activates Cdk5. Cdk5 interacts with D1 and D3 type G1 cyclins and can phosphorylate histone H1, TAU, MAP2 and NF-H and NF-M. Cdk5 activity is involved in terminal differentiation of neurons and muscle cells. Subcellular Location: Isoform 1: Cytoplasm. Cell membrane; Peripheral membrane protein. Perikaryon. Cell projection, lamellipodium. Cell projection, growth cone. Cell junction, synapse, postsynaptic cell membrane,postsynaptic density. Isoform 2: Nucleus. Tissue Specificity: Isoform 1 is ubiquitously expressed. Accumulates in cortical neurons (at protein level). Isoform 2 has only been detected in testis, skeletal muscle, colon, bone marrow and ovary. Similarity: Belongs to the protein kinase superfamily. CMGC Ser/Thr protein kinase family. CDC2/CDKX subfamily. Contains 1 protein kinase domain. SW1SS: Q00535 Gene ID: 1020 Database links: Entrez Gene: 1020Human Entrez Gene: 112568Mouse Entrez Gene: 112568Mouse Entrez Gene: 112568Mouse

	SwissProt: Q00535Human
	SwissProt: P49615Mouse
	SwissProt: Q03114Rat
	Unigene: 647078Human
	Unigene: 298798Mouse
	Unigene: 10749Rat
	Important Note: This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications. 细胞周期素依赖性激酶- 5属于小丝氨酸/苏氨酸周期素依赖性激酶家族成员, 虽与其他成员序列具有同源性, 但功能却完全不一样, 即与细胞周期关系不大, 却在中枢神经系统的发育和神经元正常功能的维持中发挥重要作用, 并与一些退行性疾病及药物成瘾有密切联系。 CDK- 5是神经系统中重要的蛋白激酶之一,周期素依赖性激酶5在神经系统发育过程中,可调节轴突生长、神经元分化及迁移.最近研究表明,周期素依赖性激酶5激酶活性失调与阿尔茨海默病的发病有关.
Picture:	MMM Commence
	Paraformaldehyde-fixed, paraffin embedded (Rat brain); Antigen retrieval by

microwave in sodium citrate buffer (pH6.0); Block endogenous peroxidase by 3%
hydrogen peroxide for 30 minutes; Blocking buffer (3% BSA) at RT for 30min;
Antibody incubation with (phospho-CDK5(Tyr15)) Polyclonal Antibody,
Unconjugated (SL6411R) at 1:400 overnight at 4°C, followed by conjugation to the
secondary antibody (labeled with HRP) and DAB staining.

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