Recombinant Human CDK5 Protein (GST tag)

Cat.NO.: TP06648

3th Edition

Synonyms:PSSALRE

Description: Cell division protein kinase 5, also known as Cyclin-dependent kinase 5, Serine/threonine-protein kinase PSSALRE, Tau protein kinase II catalytic subunit, TPKII catalytic subunit and CDK5, is a cytoplasm protein which belongs to the protein kinase superfamily, CMGC Ser/Thr protein kinase family and CDC2 / CDKX subfamily. Cyclin-dependent kinases (Cdks) are a family of proline-directed Ser/Thr kinases known for their role in the control of cell cycle progression. In 1992, this family was joined by CDK5, which is an atypical member in that it uses its own activators and is multifunctional, playing important regulatory roles in multiple cellular functions. CDK5, unlike other Cdks, is not regulated by cyclins, and its activity is primarily detected in postmitotic neurons in developing and adult nervous systems. CDK5 is activated by association with a neuron-specific activator, p35 or its isoform p39. CDK5 is probably involved in the control of the cell cycle. It interacts with D1 and D3-type G1 cyclins. CDK5 can phosphorylate histone H1, tau, MAP2 and NF-H and NF-M. It also interacts with p35 which activates the kinase. CDK5 plays important roles in various neuronal activities, including neuronal migration, synaptic activity, and neuronal cell death.

Form:PBS

Molecular Weight:59.6 kDa

Sequences: Met 1-Pro 292

Purity:> 95% by HPLC

Concentration:

Endotoxin Level:<1.0 EU per 1 ug of protein (determined by LAL method)

Storage: Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.