



CDK5

Mouse monoclonal Antibody

#54053

Catalog Number: 54053**Amount:** 100µg/100µl**Swiss-Prot No. :** Q00535**Form of Antibody:** Purified mouse monoclonal in buffer containing 0.1M Tris-Glycine (pH 7.4, 150 mM NaCl) with 0.2% sodium azide, 50% glycerol**Storage/Stability:** Store at -20°C/1 year**Immunogen:** Purified recombinant human CDK5 protein fragments expressed in E.coli**Purification:** affinity-chromatography**Specificity/Sensitivity:** This antibody detects endogenous levels of CDK5 and does not cross-react with related proteins**Reactivity:** Human, Monkey, Rat**Applications:**

Predicted MW: 35kd WB:1:500-2000 IHC/ICC:1:200-1000

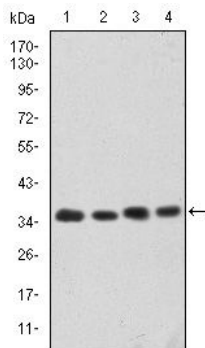


Figure 1: Western blot analysis using CDK5 mouse mAb against HeLa (1), K562 (2), PC-12 (3) and Cos7 (4) cell lysate.

Background:

CDK5 is a protein kinase of the CDK family. Unlike other members of this family, it is not activated by cyclins but by p35 (CDK5R1) and p39. An important regulator of neuronal positioning during brain development. May also play a role in synaptogenesis and neurotransmission. Substrates include TAU, MAP2, NF-H and -M, Nudel, PDE6, beta-catenin, amphiphysin, dynamin I, synapsin 1, Munc-18, and NMDA receptor 2A. Plays a role in myogenesis, haematopoietic cell differentiation, spermatogenesis, insulin secretion, and lens differentiation. Implicated in the pathology of neurofibrillary tangles and formation of senile plaques, hallmarks of Alzheimer's disease. Induces tau phosphorylation and aggregation and neurofibrillary tangle deposition and neurodegeneration in in vitro and in vivo animal models. Brain samples from Alzheimer's patients show elevated CDK5 activity.