

CDK5 Antibody

Catalog No: #32998

Package Size: #32998-1 50ul #32998-2 100ul

Orders: order@signalwayantibody.com

Support: tech@signalwayantibody.com

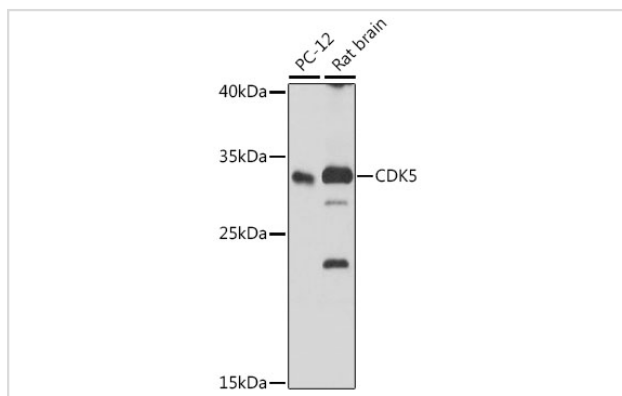
Description

| | |
|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product Name | CDK5 Antibody |
| Host Species | Rabbit |
| Clonality | Polyclonal |
| Purification | Antibodies were purified by affinity purification using immunogen. |
| Applications | WB,IF |
| Species Reactivity | Human,Mouse,Rat |
| Specificity | The antibody detects endogenous level of total CDK5 protein. |
| Immunogen Type | Recombinant Protein |
| Immunogen Description | Recombinant protein of human CDK5. |
| Target Name | CDK5 |
| Other Names | PSSALRE; |
| Accession No. | Swiss-Prot:Q00535NCBI Gene ID:1020 |
| Uniprot | Q00535 |
| GeneID | 1020; |
| SDS-PAGE MW | 33KD |
| Concentration | 1.0mg/ml |
| Formulation | Supplied at 1.0mg/mL in phosphate buffered saline (without Mg ²⁺ and Ca ²⁺), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. |
| Storage | Store at -20°C |

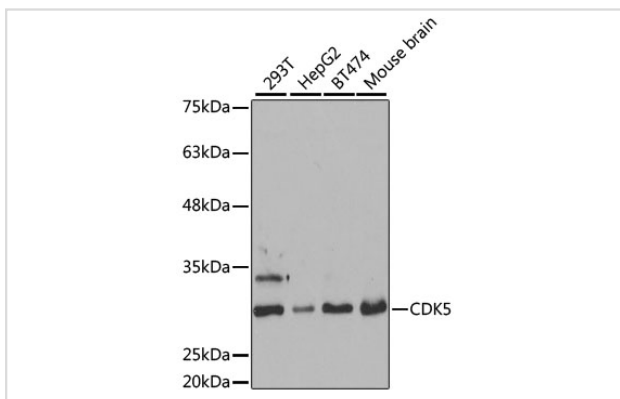
Application Details

WB □ 1:500 - 1:2000IF □ 1:10 - 1:100

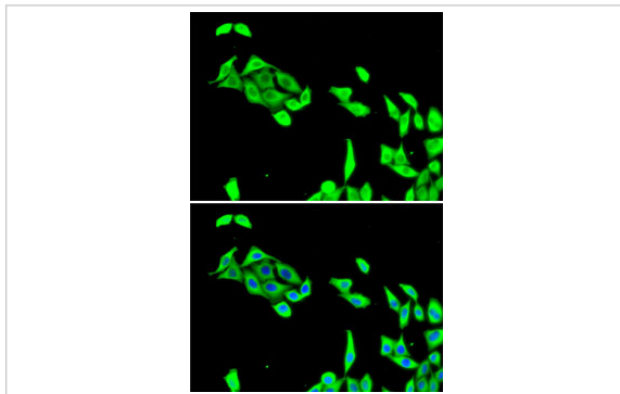
Images



Western blot analysis of extracts of various cell lines, using CDK5 at 1:1000 dilution.



Western blot analysis of extracts of various cell lines, using CDK5 at 1:1000 dilution.



Immunofluorescence analysis of U2OS cells using CDK5 . Blue: DAPI for nuclear staining.

Background

Proline-directed serine/threonine-protein kinase essential for neuronal cell cycle arrest and differentiation and may be involved in apoptotic cell death in neuronal diseases by triggering abortive cell cycle re-entry. Interacts with D1 and D3-type G1 cyclins. Phosphorylates SRC, NOS3, VIM/vimentin, p35/CDK5R1, MEF2A, SIPA1L1, SH3GLB1, PXN, PAK1, MCAM/MUC18, SEPT5, SYN1, DNM1, AMPH, SYNJ1, CDK16, RAC1, RHOA, CDC42, TONEBP/NFAT5, MAPT/TAU, MAP1B, histone H1, p53/TP53, HDAC1, APEX1, PTK2/FAK1, huntingtin/HTT, ATM, MAP2, NEFH and NEFM. Regulates several neuronal development and physiological processes including neuronal survival, migration and differentiation, axonal and neurite growth, synaptogenesis, oligodendrocyte differentiation, synaptic plasticity and neurotransmission, by phosphorylating key proteins. Activated by interaction with CDK5R1 (p35) and CDK5R2 (p39), especially in post-mitotic neurons, and promotes CDK5R1 (p35) expression in an autostimulation loop. Phosphorylates many downstream substrates such as Rho and Ras family small GTPases (e.g. PAK1, RAC1, RHOA, CDC42) or microtubule-binding proteins (e.g. MAPT/TAU, MAP2, MAP1B), and modulates actin dynamics to regulate neurite growth and/or spine morphogenesis.

Note: This product is for in vitro research use only