



Rabbit Anti-Human p35 monoclonal antibody, clone C.44.4 (CABT-L1234)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Target	CDK5R1
Immunogen	Synthetic peptide from the carboxy terminus of human p35
Isotype	IgG
Source/Host	Rabbit
Species Reactivity	Human, Mouse, Rat
Clone	C.44.4
Purification	Affinity Purified
Conjugate	Unconjugated
Applications	IHC-P, IP, IF, WB
Format	Liquid
Buffer	0.01M HEPES, pH 7.5, with 0.15M NaCl, 100µg/ml BSA, 50% glycerol
Preservative	See individual product datasheet
Storage	-20°C

BACKGROUND

Introduction	The protein encoded by this gene (p35) is a neuron-specific activator of cyclin-dependent kinase 5 (CDK5); the activation of CDK5 is required for proper development of the central
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nervous system. The p35 form of this protein is proteolytically cleaved by calpain, generating a p25 form. The cleavage of p35 into p25 results in relocalization of the protein from the cell periphery to nuclear and perinuclear regions. P25 deregulates CDK5 activity by prolonging its activation and changing its cellular location. The p25 form accumulates in the brain neurons of patients with Alzheimer's disease. This accumulation correlates with an increase in CDK5 kinase activity, and may lead to aberrantly phosphorylated forms of the microtubule-associated protein tau, which contributes to Alzheimer's disease.

Keywords	CDK5R1;cyclin-dependent kinase 5, regulatory subunit 1 (p35);p35;Cdk5r;cyclin-dependent kinase 5 activator 1;p23;CDK5 activator 1;TPKII regulatory subunit;tau protein kinase II 23 kDa subunit
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GENE INFORMATION

Entrez Gene ID [8851](#)

UniProt ID [Q15078](#)