



Rabbit Anti-Human CDK5R1 Polyclonal antibody (DPABH-22160)

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

PRODUCT INFORMATION

Immunogen	p35 fusion protein, sequence: AQPPPAQPPAPPASQLSGSQTGGSSSVKKAPHPAVTSAGTPKRVIVQASTSELLRCLGEF LCRRCYRLKHLSPDPLWLRSVDRSLLLQGWQDQGFITPANVFLYMLCRDVISSEVGS DHELQAVLLTCLYLSYSYMGNEISYPLKPFLVESCKEAFWDRCLSVINLMSSKMLQINAD PHYFTQVFSDLKNESGQEDKKRLLLGLDR (99-307aa encoded by BC020580)
Isotype	IgG
Source/Host	Rabbit
Species Reactivity	Human, Mouse, Rat
Purification	Antigen affinity purification
Conjugate	Unconjugated
Applications	WB, IP, ELISA
Positive Control	mouse brain tissue, rat brain tissue
Format	Liquid
Size	50 µl, 100 µl
Buffer	PBS with 0.1% sodium azide and 50% glycerol pH 7.3.
Preservative	0.1% Sodium Azide
Storage	Store at -20°C. Aliquoting is unnecessary for -20°C storage.

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 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 Alzheimers 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 Alzheimers disease.

Keywords CDK5R1; cyclin-dependent kinase 5, regulatory subunit 1 (p35); p23; p25; p35; CDK5R; NCK5A; CDK5P35; p35nck5a; cyclin-dependent kinase 5 activator 1; CDK5 activator 1; neuronal CDK5 activator; TPKII regulatory subunit; regulatory partner for CDK5 kinase; tau protein kinase II 23kDa subunit; cyclin-dependent kinase 5 regulatory subunit 1;

GENE INFORMATION

Entrez Gene ID [8851](#)

UniProt ID [Q15078](#)