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CDKL5 (STK9) Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7244b

Product Information

Application	WB, IHC-P, E
Primary Accession	O76039
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB3556
Calculated MW	107519
Antigen Region	982-1012

Additional Information

Gene ID	6792
Other Names	Cyclin-dependent kinase-like 5, Serine/threonine-protein kinase 9, CDKL5, STK9
Target/Specificity	This CDKL5 (STK9) antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 982-1012 amino acids from the C-terminal region of human CDKL5 (STK9).
Dilution	WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	CDKL5 (STK9) Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	CDKL5 (HGNC:11411)
Synonyms	STK9
Function	Mediates phosphorylation of MECP2 (PubMed: 15917271, PubMed:16935860). May regulate ciliogenesis (PubMed:29420175).

Cellular Location	Nucleus. Cytoplasm, cytoskeleton, cilium basal body Cytoplasm, cytoskeleton, microtubule organizing center, centrosome
Tissue Location	Expressed in brain, lung, kidney, prostate, ovary, placenta, pancreas and testis

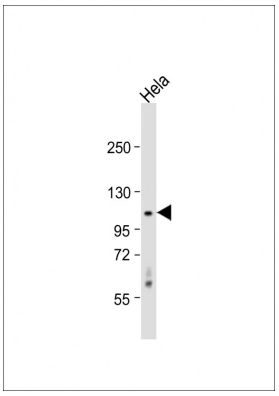
Background

Defects in STK9, a dual-specificity serine/threonine kinase, are a cause of atypical Rett syndrome. Rett syndrome is an X-linked dominant disease. It is a progressive neurologic developmental disorder and one of the most common causes of mental retardation in females. Patients appear to develop normally until 6 to 18 months of age, then gradually lose speech and purposeful hand movements and develop microcephaly, seizures, autism, ataxia, intermittent hyperventilation, and stereotypic hand movements. After initial regression, the condition stabilizes and patients usually survive into adulthood. Rett syndrome due to CDKL5-associated mutations is characterized by a severe early-onset phenotype and atypical features such as infantile spasms.

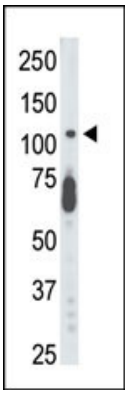
References

Kalscheuer, V.M., et al., Am. J. Hum. Genet. 72(6):1401-1411 (2003).
Montini, E., et al., Genomics 51(3):427-433 (1998).

Images



Anti-STK9 Antibody (F997) at 1:1000 dilution + Hela whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 116 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



The anti-STK9 Pab (Cat. #AP7244b) is used in Western blot to detect STK9 in mouse lung tissue lysate.

Formalin-fixed and paraffin-embedded human lung carcinoma tissue reacted with STK9 Antibody (C-term)(Cat.#AP7244b), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.