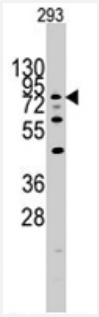
DYRK1A polyclonal antibody

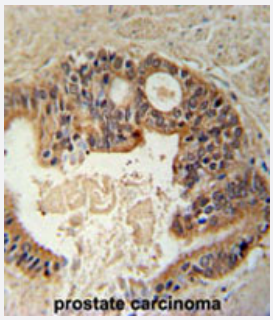
Catalog # PAB2067 Size 400 uL

Applications



Western Blot (Cell lysate)

Western blot analysis of DYRK1A polyclonal antibody (Cat # PAB2067) in 293 cell line lysates (35 ug/lane). DYRK1A (arrow) was detected using the purified Polyclonal antibody.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Formalin-fixed and paraffin-embedded human prostate carcinomareacted with DYRK1A polyclonal antibody (Cat # PAB2067), which was peroxidase-conjugated to the secondary antibody, followed by AEC staining.
This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

Specification

Product Description	Rabbit polyclonal antibody raised against synthetic peptide of DYRK1A.
Immunogen	A synthetic peptide (conjugated with KLH) corresponding to N-terminus of human DYRK1A.
Host	Rabbit
Reactivity	Human
Form	Liquid
Purification	Protein A purification

Recommend Usage	Western Blot (1:1000) Immunohistochemistry (1:50-100) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS (0.09% sodium azide)
Storage Instruction	Store at 4°C. For long term storage store at -20°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only.

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Gene Info — DYRK1A

Entrez GeneID	1859
Protein Accession#	NP_001387;Q13627
Gene Name	DYRK1A
Gene Alias	DYRK, DYRK1, HP86, MNB, MNBH
Gene Description	dual-specificity tyrosine-(Y)-phosphorylation regulated kinase 1A
Omim ID	600855
Gene Ontology	Hyperlink

Gene Summary	This gene encodes a member of the Dual-specificity tyrosine phosphorylation-regulated kinase (DYRK) family. This member contains a nuclear targeting signal sequence, a protein kinase domai n, a leucine zipper motif, and a highly conservative 13-consecutive-histidine repeat. It catalyzes its autophosphorylation on serine/threonine and tyrosine residues. It may play a significant role in a si gnaling pathway regulating cell proliferation and may be involved in brain development. This gene is a homolog of Drosophila mnb (minibrain) gene and rat Dyrk gene. It is localized in the Down sy ndrome critical region of chromosome 21, and is considered to be a strong candidate gene for le arning defects associated with Down syndrome. Alternative splicing of this gene generates sever al transcript variants differing from each other either in the 5' UTR or in the 3' coding region. These variants encode at least five different isoforms. [provided by RefSeq
Other Designations	MNB/DYRK protein kinase|OTTHUMP00000109090|dual specificity YAK1-related kinase|minibra in homolog|mnb protein kinase homolog hp86|protein kinase minibrain homolog|serine/threonine kinase MNB|serine/threonine-specific protein kinase

Publication Reference

- Increased expression of Dyrk1a in HPV16 immortalized keratinocytes enable evasion of apoptosis.

  Chang HS, Lin CH, Yang CH, Yen MS, Lai CR, Chen YR, Liang YJ, Yu WC.

  International Journal of Cancer 2007 Jun; 120(11):2377.

  Application: IF, IHC-Fr, WB-Tr, Human, FK 30 cells, Normal and malignant exocervical tissue specimens

- Dual-specificity tyrosine phosphorylation-regulated kinase 1A does not require tyrosine phosphorylation for activity in vitro.

  Adayev T, Chen-Hwang MC, Murakami N, Lee E, Bolton DC, Hwang YW.

  Biochemistry 2007 Jun; 46(25):7614.

  Application: WB, Cercopithecus aethiops, COS7 cells

- DYRK1A autophosphorylation on serine residue 520 modulates its kinase activity via 14-3-3 binding.

  Alvarez M, Altafaj X, Aranda S, de la Luna S.

  Molecular Biology of the Cell 2007 Apr; 18(4):1167.

  Application: IP, WB, Human, Rat, PC-12, U2-OS cells

Disease

- Alzheimer Disease
- Genetic Predisposition to Disease