

Dyrk1B Polyclonal Antibody

Catalog # AP69619

Product Information

Application	WB, IHC-P, IF, ICC, E
Primary Accession	Q9Y463
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	69198

Additional Information

Gene ID	9149
Other Names	DYRK1B; MIRK; Dual specificity tyrosine-phosphorylation-regulated kinase 1B; Minibrain-related kinase; Mirk protein kinase
Dilution	WB--Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/20000. Not yet tested in other applications. IHC-P--N/A IF--1:50~200 ICC--N/A E--N/A
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20°C

Protein Information

Name	DYRK1B
Synonyms	MIRK
Function	Dual-specificity kinase which possesses both serine/threonine and tyrosine kinase activities. Plays an essential role in ribosomal DNA (rDNA) double-strand break repair and rDNA copy number maintenance (PubMed: 33469661). During DNA damage, mediates transcription silencing in part via phosphorylating and enforcing DSB accumulation of the histone methyltransferase EHMT2 (PubMed: 32611815). Enhances the transcriptional activity of TCF1/HNF1A and FOXO1. Inhibits epithelial cell migration. Mediates colon carcinoma cell survival in mitogen-poor environments. Inhibits the SHH and WNT1 pathways, thereby enhancing adipogenesis. In addition, promotes expression of the gluconeogenic enzyme glucose-6-phosphatase catalytic subunit 1 (G6PC1).
Cellular Location	Nucleus. Nucleus, nucleolus. Chromosome. Note=Localizes to sites of double-strand breaks (DSBs) following DNA damage.

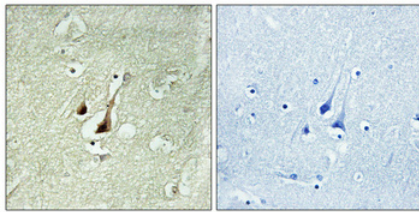
Tissue Location

Highest expression in skeletal muscle, testis, heart and brain with little expression in colon or lung. Expressed in a variety of tumor cell lines.

Background

Dual-specificity kinase which possesses both serine/threonine and tyrosine kinase activities. Enhances the transcriptional activity of TCF1/HNF1A and FOXO1. Inhibits epithelial cell migration. Mediates colon carcinoma cell survival in mitogen-poor environments. Inhibits the SHH and WNT1 pathways, thereby enhancing adipogenesis. In addition, promotes expression of the gluconeogenic enzyme glucose-6-phosphatase (G6PC).

Images



Immunohistochemical analysis of paraffin-embedded Human brain. Antibody was diluted at 1:100(4°, overnight). High-pressure and temperature Tris-EDTA, pH8.0 was used for antigen retrieval. Negative control (right) obtained from antibody was pre-absorbed by immunogen peptide.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.