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Mouse Dyrk1b Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP14617c

Product Information

Application	WB, E
Primary Accession	Q9Z188
Other Accession	Q9Y463, NP_001033046.1, NP_034222.1
Reactivity	Mouse
Predicted	Human, Rat, Bovine, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB34757
Calculated MW	69178
Antigen Region	376-403

Additional Information

Gene ID	13549
Other Names	Dual specificity tyrosine-phosphorylation-regulated kinase 1B, Dyrk1b
Target/Specificity	This Mouse Dyrk1b antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 376-403 amino acids from the Central region of mouse Dyrk1b.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
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	Mouse Dyrk1b Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	Dyrk1b
Function	Dual-specificity kinase which possesses both serine/threonine and tyrosine kinase activities (PubMed:12633499). Plays an essential role in ribosomal DNA (rDNA) double-strand break repair and rDNA copy number maintenance.

	During DNA damage, mediates transcription silencing in part via phosphorylating and enforcing DSB accumulation of the histone methyltransferase EHMT2. 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 {ECO:0000250|UniProtKB:Q9Y463}. Nucleus, nucleolus {ECO:0000250|UniProtKB:Q9Y463}. Chromosome {ECO:0000250|UniProtKB:Q9Y463}. Note=Localizes to sites of double- strand breaks (DSBs) following DNA damage {ECO:0000250|UniProtKB:Q9Y463}
Tissue Location	Isoform 1 and isoform 2 are broadly expressed. Isoform 3 seems specific for skeletal muscle (at protein level)

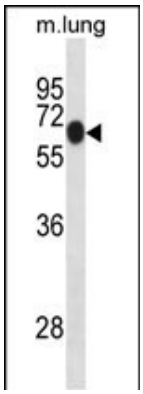
Background

Dual-specificity kinase which possesses both serine/ threonine and tyrosine kinase activity. Enhances the transcriptional activity of TCF1/HNF1A and FOXO1. Inhibits epithelial cell migration. Mediates colon carcinoma cell survival in mitogen-poor environments.

References

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Munton, R.P., et al. Mol. Cell Proteomics 6(2):283-293(2007)
Mercer, S.E., et al. J. Biol. Chem. 280(27):25788-25801(2005)
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Images



Mouse Dyrk1b Antibody (Center) (Cat. #AP14617c) western blot analysis in mouse lung tissue lysates (35ug/lane).This demonstrates the Dyrk1b antibody detected the Dyrk1b protein (arrow).

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