

Rabbit Anti-Dyrk1B antibody

SL6259R

Product Name:	Dyrk1B
Chinese Name:	双特异性酪氨酸磷酸化调节激酶1B抗体
Alias:	Dual specificity tyrosine (Y) phosphorylation regulated kinase 1B; Dual specificity tyrosine phosphorylation regulated kinase 1B; Dual specificity tyrosine-phosphorylation-regulated kinase 1B; DYR 1B; DYR1A; DYR1B; DYR1B_HUMAN; DYRK 1B; Dyrk1b; Minibrain related kinase; Minibrain-related kinase; MIRK; Mirk protein kinase.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Dog, Pig, Cow,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	69kDa
Cellular localization:	The nucleus
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human MIRK/Dyrk1B:35-130/629
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	<u>PubMed</u>
Product Detail:	Dyrk (for dual specificity tyrosine phosphorylation regulated kinase) is the homolog of the Drosophila mnb (minibrain) gene which is required for neurogenesis. Dyrk is a dual-specificity tyrosine kinase and serine/threonine kinase, which is self regulated by

tyrosine phosphorylation. Several related mammalian proteins compose the Dyrk family of dual specificity protein kinases, including Dyrk1A, Dyrk1B, Dyrk1C, Dyrk2, Dyrk3, Dyrk4A and Dyrk4B. The Dyrk family members are thought to be involved in the regulation of cellular growth and/or development. Dyrk1B localizes to the nucleus in muscle and testis. Specifically, Dyrk1B plays a critical role in muscle differentiation by regulating motility, transcription, cell cycle progression and cell survival. Dyrk1B is also found is several solid tumors, where it acts as a downstream effector of Rac1 or Kras to mediate cell survival.

Function:

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.

Subunit:

Dimer. Interacts with DCOHM, MAP2K3/MKK3, RANBP9 and TCF1/HNF1A. Part of a complex consisting of RANBP9, RAN, DYRK1B and COPS5. Interacts with DCAF7.

Subcellular Location:

Nucleus.

Tissue Specificity:

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

Post-translational modifications:

Autophosphorylated on tyrosine residues. Phosphorylated by MAP kinase. Tyrosine phosphorylation may be required for dimerization.

Similarity:

Belongs to the protein kinase superfamily. CMGC Ser/Thr protein kinase family. MNB/DYRK subfamily.

Contains 1 protein kinase domain.

SWISS:

Q9Y463

Gene ID:

9149

Database links:

Entrez Gene: 9149Human

Entrez Gene: 13549Mouse

Entrez Gene: 308468Rat

Omim: 604556Human

SwissProt: Q9Y463Human

SwissProt: Q9Z188Mouse

<u>Unigene: 130988</u>Human

Unigene: 57249 Mouse

Unigene: 75845Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.