



Dyrk1A Monoclonal Antibody

Catalog No	YP-mAb-14734
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB
Gene Name	DYRK1A
Immunogen	The antiserum was produced against synthesized peptide derived from human DYRK1A. AA range:21-70
Specificity	Dyrk1A Monoclonal Antibody detects endogenous levels of Dyrk1A protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-1:2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	DYRK;DYRK1;hMNB;HP86;MNB;DYRK1A;DYRK1A;Dual specificity tyrosine-phosphorylation-regulated kinase 1A;MNBH;Dual specificity YAK1-related kinase;Protein kinase minibrain homolog
Observed Band	90kD
Calculated Molecular Weight	90kD
Cell Pathway	Nucleus . Nucleus speckle .
Tissue Specificity	Ubiquitous. Highest levels in skeletal muscle, testis, fetal lung and fetal kidney.
Function	alternative products:Additional isoforms seem to exist,catalytic activity:ATP + a protein = ADP + a phosphoprotein.,developmental stage:Expressed in the developing central nervous system.,disease:Overexpressed 1.5-fold in fetal Down syndrome brain.,enzyme regulation:Inhibited by RANBP9.,function:May play a role in a signaling pathway regulating nuclear functions of cell proliferation. Phosphorylates serine, threonine and tyrosine residues in its sequence and in exogenous substrates.,PTM:Autophosphorylated on tyrosine residues.,similarity:Belongs to the protein kinase superfamily. CMGC Ser/Thr protein kinase family. MNB/DYRK subfamily.,similarity:Contains 1 protein kinase domain.,subunit:Interacts RAD54L2/ARIP4 (By similarity). Interacts with



RANBP9.,tissue specificity:Ubiquitous. Highest levels in skeletal muscle, testis, fetal lung and fetal kidney.,

Background

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 domain, 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 signaling 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 syndrome critical region of chromosome 21, and is considered to be a strong candidate gene for learning defects associated with Down syndrome. Alternative splicing of this gene generates several transcript variants differing from each other either in the 5' UTR or in the 3' UTR.

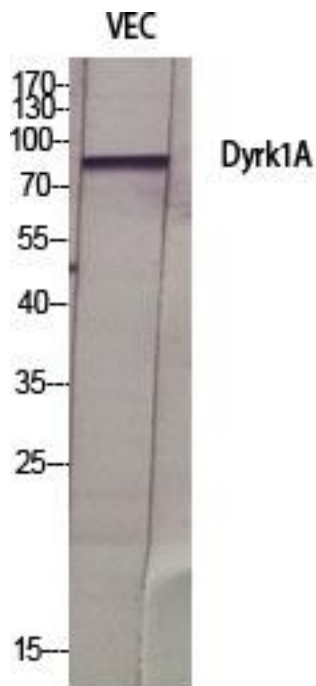
matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Western Blot analysis of various cells using Dyrk1A Monoclonal Antibody