

Dyrk1A Polyclonal Antibody

Catalog No: YT1435

Reactivity: Human; Mouse; Rat

Applications: WB;IHC;IF;ELISA

Q13627

Q61214

Target: DYR1A

Gene Name: DYRK1A

Protein Name: Dual specificity tyrosine-phosphorylation-regulated kinase 1A

Human Gene Id: 1859

Human Swiss Prot

No:

Mouse Gene ld: 13548

Mouse Swiss Prot

No:

Rat Gene ld: 25255

Rat Swiss Prot No: Q63470

Immunogen: The antiserum was produced against synthesized peptide derived from human

DYR1A. AA range:21-70

Specificity: Dyrk1A Polyclonal Antibody detects endogenous levels of Dyrk1A protein.

Formulation : Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

Dilution: WB 1:500 - 1:2000. IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:20000. Not

yet tested in other applications.

Purification: The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.



Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 90kD

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' co

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.,

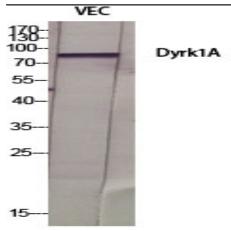
Subcellular Location:

Nucleus . Nucleus speckle .

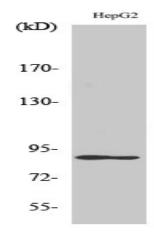
Expression:

Ubiquitous. Highest levels in skeletal muscle, testis, fetal lung and fetal kidney.

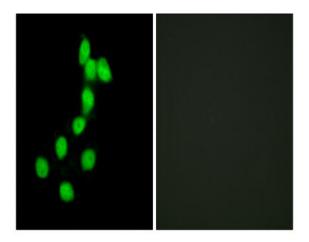
Products Images



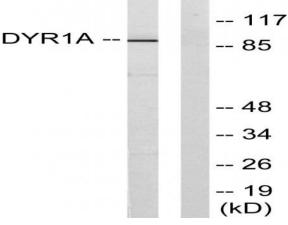
Western Blot analysis of various cells using Dyrk1A Polyclonal Antibody diluted at 1:500 cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit (SC-003,Inventbiotech,MN,USA).



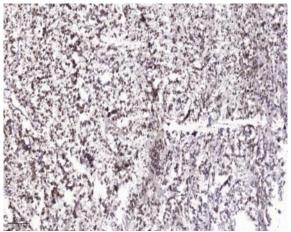
Western Blot analysis of HepG2 cells using Dyrk1A Polyclonal Antibody diluted at 1:500 cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit (SC-003,Inventbiotech,MN,USA).



Immunofluorescence analysis of HepG2 cells, using DYR1A Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from HepG2 cells, using DYR1A Antibody. The lane on the right is blocked with the synthesized peptide.



Immunohistochemical analysis of paraffin-embedded human Colon cancer. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-EDTA,pH9.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 45min).