



DYRK3 Monoclonal Antibody

Catalog No	YP-mAb-04957
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB
Gene Name	DYRK3
Immunogen	Synthesized peptide derived from human protein . at AA range: 1-80
Specificity	DYRK3 Monoclonal Antibody detects endogenous levels of protein.
Formulation	Liquid in PBS containing 50% glycerol, 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	phosphorylation regulated kinase 3;Dual specificity tyrosine phosphorylation-regulated kinase 3;Dual specificity tyrosine-phosphorylation-regulated kinase 3;Dyrk3;DYRK3_HUMAN;DYRK5;hYAK3 2;Protein kinase Dyrk3;RED;REDK;Regulatory erythroid kinase;Dual specificity tyrosine-phosphorylation-regulated kinase 3 (EC 2.7.12.1) (Regulatory erythroid kinase) (REDK)
Observed Band	66 kDa
Calculated Molecular Weight	66 kDa
Cell Pathway	Nucleus . Cytoplasm . Nucleus speckle . Cytoplasmic granule . Cytoplasm, cytoskeleton, microtubule organizing center, centrosome . Associates with membraneless organelles in the cytoplasm and nucleus (PubMed:29973724). Shuttles between cytoplasm and stress granules (PubMed:20167603). Localized predominantly on distinct speckles distributed throughout the cytoplasm of the cell (PubMed:20167603). At low concentration, shows a homogeneous distribution throughout the cytoplasm and does not condense in speckles. During oxidative and osmotic stress, localizes to stress granules (PubMed:20167603). .
Tissue Specificity	Isoform 1: Highly expressed in testis and in hematopoietic tissue such as fetal liver, and bone marrow (PubMed:10779429). Isoform 1: Predominant form in fetal liver and bone marrow (PubMed:10779429). Isoform 1: Present at low



levels in heart, pancreas, lymph node and thymus (PubMed:10779429). Isoform 2: Highly expressed in testis and in hematopoietic tissue such as fetal liver, and bone marrow (PubMed:10779429). Isoform 2: Predominant form in testis. Isoform 2: Present at low levels in heart, pancreas, lymph node and thymus (PubMed:10779429).

Function

catalytic activity:ATP + a protein = ADP + a phosphoprotein., cofactor:Magnesium.,function:Negative regulator of EPO-dependent erythropoiesis, may place an upper limit on red cell production during stress erythropoiesis. Inhibits cell death due to cytokine withdrawal in hematopoietic progenitor cells. May act by regulating CREB/CRE signaling.,induction:By erythropoietin.,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.,tissue specificity:Highly expressed in testis where isoform 2 is the predominant form and in hematopoietic tissue such as fetal liver, and bone marrow where isoform 1 predominates. Both isoforms are present at low levels in heart, pancreas, lymph node, and thymus.,

Background

This gene product belongs to the DYRK family of dual-specificity protein kinases that catalyze autophosphorylation on serine/threonine and tyrosine residues. The members of this family share structural similarity, however, differ in their substrate specificity, suggesting their involvement in different cellular functions. The encoded protein has been shown to autophosphorylate on tyrosine residue and catalyze phosphorylation of histones H3 and H2B in vitro. Alternatively spliced transcript variants encoding different isoforms have been identified. [provided by RefSeq, Jul 2008],

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