



# DYRK3 Polyclonal Antibody

<b>Catalog No</b>	YP-Ab-04957
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Mouse;Rat
<b>Applications</b>	WB;ELISA
<b>Gene Name</b>	DYRK3
<b>Protein Name</b>	Dual specificity tyrosine-phosphorylation-regulated kinase 3 (EC 2.7.12.1) (Regulatory erythroid kinase) (REDK)
<b>Immunogen</b>	Synthesized peptide derived from human protein . at AA range: 1-80
<b>Specificity</b>	DYRK3 Polyclonal Antibody detects endogenous levels of protein.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, and 0.02% sodium azide.
<b>Source</b>	Polyclonal, Rabbit,IgG
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Dilution</b>	WB 1:500-2000 ELISA 1:5000-20000
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	
<b>Observed Band</b>	64kD
<b>Cell Pathway</b>	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). .
<b>Tissue Specificity</b>	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).
<b>Function</b>	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