

## RPIA rabbit pAb

<b>Catalog No :</b>	YT6982
<b>Reactivity :</b>	Human;Mouse
<b>Applications :</b>	WB
<b>Target :</b>	RPIA
<b>Fields :</b>	>>Pentose phosphate pathway;>>Metabolic pathways;>>Carbon metabolism;>>Biosynthesis of amino acids
<b>Gene Name :</b>	RPIA RPI
<b>Protein Name :</b>	RPIA
<b>Human Gene Id :</b>	22934
<b>Human Swiss Prot No :</b>	P49247
<b>Mouse Gene Id :</b>	19895
<b>Mouse Swiss Prot No :</b>	P47968
<b>Immunogen :</b>	Synthesized peptide derived from human RPIA AA range: 256-306
<b>Specificity :</b>	This antibody detects endogenous levels of RPIA at Human/Mouse
<b>Formulation :</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source :</b>	Polyclonal, Rabbit,IgG
<b>Dilution :</b>	WB 1[?]500-2000
<b>Purification :</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Concentration :</b>	1 mg/ml

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

**Molecularweight :** 34kD

**Background :** The protein encoded by this gene is an enzyme, which catalyzes the reversible conversion between ribose-5-phosphate and ribulose-5-phosphate in the pentose-phosphate pathway. This gene is highly conserved in most organisms. The enzyme plays an essential role in the carbohydrate metabolism. Mutations in this gene cause ribose 5-phosphate isomerase deficiency. A pseudogene is found on chromosome 18. [provided by RefSeq, Mar 2010],

**Function :** catalytic activity:D-ribose 5-phosphate = D-ribulose 5-phosphate.,disease:Defects in RPIA are the cause of ribose 5-phosphate isomerase deficiency [MIM:608611]. A patient has been described with a deficiency of ribose 5-phosphate isomerase who presented with leukoencephalopathy and peripheral neuropathy. Proton magnetic resonance spectroscopy of the brain revealed a highly elevated level of the polyols ribitol and D-arabitol, which were subsequently also found in high concentrations in body fluids. Deficient activity of RPIA, one of the pentose phosphate pathway enzymes, has been demonstrated in fibroblasts.,pathway:Carbohydrate degradation; pentose phosphate pathway; D-ribose 5-phosphate from D-ribulose 5-phosphate (non-oxidative stage): step 1/1.,similarity:Belongs to the ribose 5-phosphate isomerase family.,

**Subcellular Location :** cytosol,integral component of membrane,intracellular membrane-bounded organelle,

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