

RPIA rabbit pAb

Catalog No: YT6982

Reactivity: Human; Mouse

Applications: WB

Target: RPIA

Fields: >>Pentose phosphate pathway;>>Metabolic pathways;>>Carbon

metabolism;>>Biosynthesis of amino acids

Gene Name: RPIA RPI

Protein Name: RPIA

Human Gene Id: 22934

Human Swiss Prot

No:

Mouse Gene Id: 19895

Mouse Swiss Prot

No:

Immunogen: Synthesized peptide derived from human RPIA AA range: 256-306

Specificity: This antibody detects endogenous levels of RPIA at Human/Mouse

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

Source: Polyclonal, Rabbit, IgG

P49247

P47968

Dilution: WB 1 ? 500-2000

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

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

1/2



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],

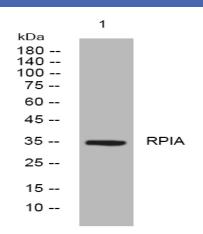
Function:

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,

Products Images



Western blot analysis of lysates from HuvEc cells, primary antibody was diluted at 1:1000, 4° over night