

HPRT Monoclonal Antibody

Catalog No: YM0335

Reactivity: Human

Applications: WB;ELISA

Target: HPRT

Fields: >>Purine metabolism;>>Drug metabolism - other enzymes;>>Metabolic

pathways;>>Nucleotide metabolism

Gene Name: HPRT1

Protein Name: Hypoxanthine-guanine phosphoribosyltransferase

Human Gene Id: 3251

Human Swiss Prot P00492

No:

Mouse Swiss Prot P00493

No:

Immunogen: Purified recombinant fragment of HPRT expressed in E. Coli.

Specificity: HPRT Monoclonal Antibody detects endogenous levels of HPRT protein.

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

Source: Monoclonal, Mouse

Dilution: WB 1:500 - 1:2000. ELISA: 1:10000. Not yet tested in other applications.

Purification: Affinity purification

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

Molecularweight: 25kD

1/3



Cell Pathway: Purine metabolism; Drug metabolism;

P References: 1. Manjanatha MG, et.al Mutat Res. 2004 Mar 22;547(1-2):5-18.

Background: hypoxanthine phosphoribosyltransferase 1(HPRT1) Homo sapiens The protein

encoded by this gene is a transferase, which catalyzes conversion of hypoxanthine to inosine monophosphate and guanine to guanosine monophosphate via transfer of the 5-phosphoribosyl group from 5-phosphoribosyl

1-pyrophosphate. This enzyme plays a central role in the generation of purine nucleotides through the purine salvage pathway. Mutations in this gene result in

Lesch-Nyhan syndrome or gout.[provided by RefSeq, Jun 2009],

Function: catalytic activity:GMP + diphosphate = guanine + 5-phospho-alpha-D-ribose

1-diphosphate.,catalytic activity:IMP + diphosphate = hypoxanthine + 5-phosphoalpha-D-ribose 1-diphosphate.,cofactor:Binds 2 magnesium ions per subunit. One of the ions does not make direct protein contacts.,disease:Defects in HPRT1 are the cause of gout [MIM:300323]; also known as HPRT-related gout or Kelley-Seegmiller syndrome. Gout is characterized by partial enzyme activity and hyperuricemia.,disease:Defects in HPRT1 are the cause of Lesch-Nyhan syndrome (LNS) [MIM:300322]. LNS is characterized by complete lack of enzymatic activity that results in hyperuricemia, choreoathetosis, mental retardation, and compulsive self-mutilation.,online information:Hypoxanthinequanine phosphoribosyltransferase entry,pathway:Purine metabolism; IMP

biosynthesis via salvage pathway; IMP from hypoxanthine: step 1/1., similarity:B

Subcellular Location:

Cytoplasm.

Expression:

Brain,

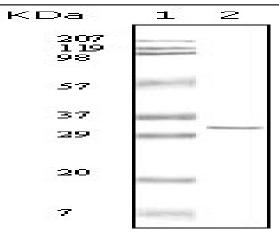
Sort :

7774

No4:

1

Products Images



Western Blot analysis using HPRT Monoclonal Antibody against truncated HPRT recombinant protein.