

## **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



**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-phospho-alpha-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:Hypoxanthine-guanine phosphoribosyltransferase entry,pathway:Purine metabolism; IMP biosynthesis via salvage pathway; IMP from hypoxanthine: step 1/1.,similarity:B

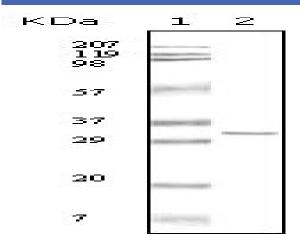
Subcellular Location:

Cytoplasm.

**Expression:** 

Brain,

## **Products Images**



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