Immunoway
Best Tools for immunology Research

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 No :	P00492
Mouse Swiss Prot No :	P00493
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.

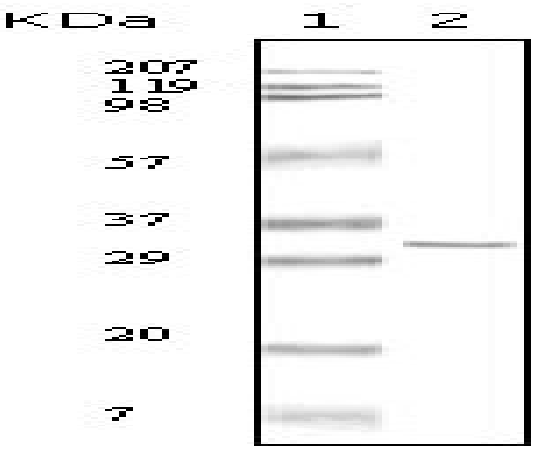
Background : hypoxanthine phosphoribosyltransferase 1(HPRT1) Homo sapiens The protein encoded by this gene is a transferase, which catalyzes conversion of hypoxanthine to inosine monophosphate and guanine to guanosine monophosphate via transfer of the 5-phosphoribosyl group from 5-phosphoribosyl 1-pyrophosphate. 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.