

# HPRT Antibody

Purified Mouse Monoclonal Antibody

Catalog # AO1046a

## Product Information

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<b>Application</b>	WB, E
<b>Primary Accession</b>	<a href="#">P00492</a>
<b>Reactivity</b>	Human
<b>Host</b>	Mouse
<b>Clonality</b>	Monoclonal
<b>Clone Names</b>	1F8D11
<b>Isotype</b>	IgG2b
<b>Calculated MW</b>	24579
<b>Description</b>	The HPRT1 gene provides instructions for making an enzyme called hypoxanthine phosphoribosyltransferase 1. This enzyme allows cells to recycle purines, some of the building blocks of DNA and its chemical cousin RNA. The enzyme hypoxanthine-guanine phosphoribosyltransferase (E.C.2.4.2.8., HPRT) plays a crucial role in uric acid synthesis and purine metabolism. This enzyme catalyzes the conversion of hypoxanthine and guanine to inosine monophosphate (IMP) and guanosine monophosphate (GMP), respectively, and uses phosphoribosylpyrophosphate (PRPP) as a cosubstrate and as a source of energy. This pathway is also known as the purine salvage pathway because it allows cells to reuse purine compounds to build DNA and RNA.
<b>Immunogen</b>	Purified recombinant fragment of HPRT expressed in E. Coli.
<b>Formulation</b>	Ascitic fluid containing 0.03% sodium azide.

## Additional Information

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<b>Gene ID</b>	3251
<b>Other Names</b>	Hypoxanthine-guanine phosphoribosyltransferase, HGPRT, HGPRTase, 2.4.2.8, HPRT1, HPRT
<b>Dilution</b>	WB~~1/500 - 1/2000 E~~N/A
<b>Storage</b>	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
<b>Precautions</b>	HPRT Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

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<b>Name</b>	HPRT1
<b>Synonyms</b>	HPRT
<b>Function</b>	Converts guanine to guanosine monophosphate, and hypoxanthine to inosine monophosphate. Transfers the 5-phosphoribosyl group from 5-phosphoribosylpyrophosphate onto the purine. Plays a central role in the generation of purine nucleotides through the purine salvage pathway.
<b>Cellular Location</b>	Cytoplasm.

## References

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

## Images

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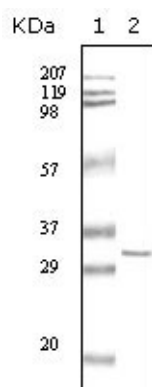


Figure 1: Western blot analysis using HPTR mouse mAb against truncated HPRT recombinant protein.

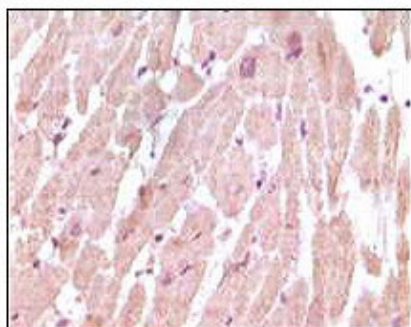


Figure 2: Immunohistochemical analysis of paraffin-embedded human normal cardiac muscle tissue, showing cytoplasmic localization using cTnI mouse mAb with DAB staining.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.