

HPRT(JU03-26)

Cat#: ET1706-08

Product Type: Recombinant rabbit monoclonal IgG, primary antibodies

Species reactivity: Human, Mouse, Rat, Zebrafish

Applications: WB, IHC, IP

Molecular Wt.: 25 kDa

Clone number: JU03-26

Description: HPRT (hypoxanthine phosphoribosyltransferase 1), also known as HGPRT or HPRT1, is a 218 amino acid cytoplasmic protein that belongs to the purine/pyrimidine phosphoribosyltransferase family. Involved in purine metabolism, HPRT functions as a purine salvage enzyme that catalyzes the conversion of hypoxanthine and guanine to their respective mononucleotides (inosine monophosphate and guanosine monophosphate, respectively). HPRT exists as a homotetramer that can bind two magnesium ions as cofactors. Defects in the gene encoding HPRT are the cause of gout and Lesch-Nyhan syndrome (LNS), both of which are characterized by a partial or complete lack of HPRT enzymatic activity. While a partial loss of HPRT enzymatic activity results in a buildup of uric acid (gout), a total loss of enzymatic activity results in hyperuricaemia, mental retardation, choreoathetosis and compulsive self-mutilation, all of which are symptoms associated with LNS. The severity of these diseases suggests an essential role for HPRT in purine metabolism.

Immunogen:

Recombinant protein.

Positive control:

Hela, A431, MCF-7, 293, rat kidney tissue lysate, rat brain tissue, mouse testis tissue lysate, mouse colon tissue lysate, Zebrafish tissue lysates, human tonsil tissue, human colon cancer tissue, human kidney tissue.

Subcellular location:

Cytoplasm.

Database links:

SwissProt: P00492 (Human) P00493 (Mouse) P27605 (Rat)

Recommended Dilutions:

WB: 1:500-1:2,000 **IHC:** 1:50-1:200

IP: 1:10-1:50

Storage Buffer:

1*TBS (pH7.4), 1%BSA, 40%Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction:

Store at +4° C after thawing. Aliquot store at -20° C or -80° C. Avoid repeated freeze / thaw cycles.

Purity: ProA affinity purified.

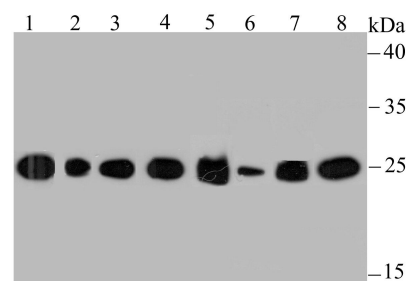


Fig1: Western blot analysis of HPRT on different lysates using anti-HPRT antibody at 1/500 dilution.

Positive control:

Lane 1: Hela

Lane 2: A431

Lane 3: MCF-7

Lane 4: 293

Lane 5: Rat kidney

Lane 6: Rat brain

Lane 7: Mouse testis

Lane 8: Mouse colon

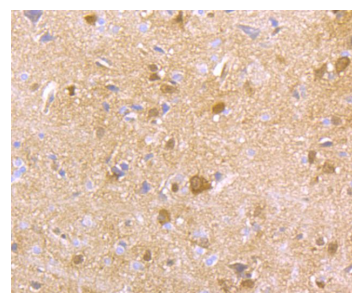


Fig2: Immunohistochemical analysis of paraffin-embedded rat brain tissue using anti-HPRT antibody. Counter stained with hematoxylin.

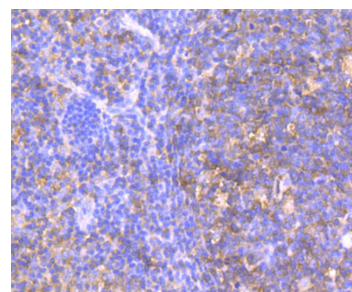


Fig3: Immunohistochemical analysis of paraffin-embedded human tonsil tissue using anti-HPRT antibody. Counter stained with hematoxylin.

Hangzhou HuaAn Biotechnology Co.,Ltd.

Orders: 0086-571-88062880

Support: 0086-571-89986345

Service mail: tech@huabio.com

www.huabio.com



华安生物

Applications: WB=Western blot IP=Immunoprecipitation IHC=Immunohistochemistry IF=Immunofluorescence FC=Flow cytometry
Species Cross-Reactivity: H=human M=mouse R=rat Hm=hamster Mk=monkey Mi=mink C=chicken Dm=D.melanogaster X=Xenopus Z=zebrafish
B=bovine Dg=dog Pg=pig Sc=S.

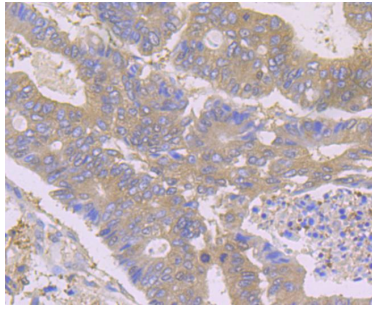


Fig4: Immunohistochemical analysis of paraffin-embedded human colon cancer tissue using anti-HPRT antibody. Counter stained with hematoxylin.

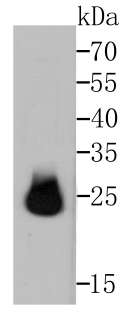


Fig6: Western blot analysis of HPRT on Zebrafish tissue lysates using anti-HPRT antibody at 1/500 dilution.

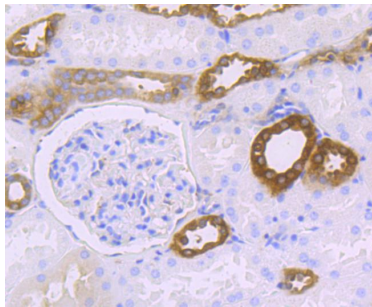


Fig5: Immunohistochemical analysis of paraffin-embedded human colon cancer tissue using anti-HPRT antibody. Counter stained with hematoxylin.

Background **References** **Biotechnology Co.,Ltd.**



1.Ordóñez-Mosquera L et al. Acute and chronic mitochondrial respiratory chain deficiency differentially regulate

lysosomal biogenesis. *Sci Rep* 7:45076 (2017).

Applications: WB=Western blot IP=Immunoprecipitation IHC=Immunohistochemistry IF=Immunofluorescence FC=Flow cytometry

2. Angelika Pflü M et al. HR23b expression is a potential predictive biomarker for HDAC inhibitor treatment in mesenchymal tumours and is associated with response to vorinostat. *J Pathol Clin Res* 2:59-71 (2016).

Species: C=rat H=human M=mouse B=rat Hs=hamster M=monkey Mi=mink C=chicken Dr=Dromedary X=Xenopus Z=zebrafish
B=bovine Dg=dog Pg=pig Sc=S.