

Recombinant human HPRT protein

Catalog Number: ATGP3466

PRODUCT INFORMATION

Expression system

E.coli

Domain

1-218aa

UniProt No.

P00492

NCBI Accession No.

NP_000185

Alternative Names

Hypoxanthine-guanine phosphoribosyltransferase, HGPRT, HGPRTase, HPRT

PRODUCT SPECIFICATION

Molecular Weight

26.7 kDa (238aa) confirmed by MALDI-TOF

Concentration

0.5mg/ml (determined by Bradford assay)

Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing, 20% glycerol

Purity

> 95% by SDS-PAGE

Biological Activity

Specific activity is > 15unit/mg and is defined as the amount of enzyme that catalyze the formation of 1 umole of guanosine 5-monophosphate(GMP) per minute from guanine and phosphoribosyl pyrophosphate at pH 7.5 at 37C.

Tag

His-Tag

Application

Enzyme Activity,SDS-PAGE

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description

Hypoxanthine-guanine phosphoribosyltransferase, also known as HPRT1 has a central role in the generation of purine nucleotides through the purine salvage pathway. The enzyme primarily functions to salvage purines from

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degraded DNA to renewed purine synthesis. In this role, it acts as a catalyst in the reaction between guanine and phosphoribosyl pyrophosphate to form GMP. Recombinant human HPRT1, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography techniques.

Amino acid Sequence

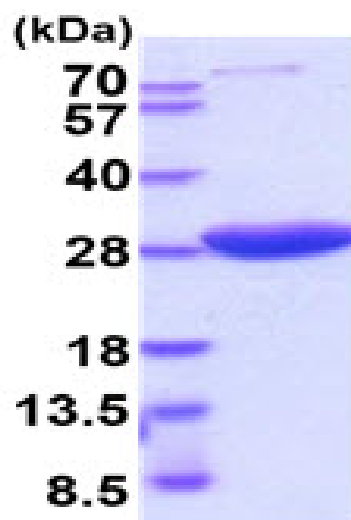
MGSSHHHHHH SGLVPRGSH MATRSPGVVI SDDEPGYDLD LFCIPNHYAE DLERVFIPHG LIMDRTERLA RDVMKEMGGH
HIVALCVLKG GYKFFADLLD YIKALNRNSD RSIPMTVDFI RLKSYCNDQS TGDIKVIGGD DLSTLTGKNV LIVEDIIDTG
KTMQTLLSLV RQYNPKMVKV ASLLVKRTPR SVGYKPDFVG FEIPDKFVVG YALDYNEYFR DLNHVCVISE TGKAKYKA

General References

Hladnik U., et al. (2008) Arch Neurol. 65(9):1240-3.
Sculley DG., et al. (1992) Hum Genet. 90(3):195-207191.

DATA

SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

15% SDS-PAGE (3ug)