

Recombinant Human HP, His-tagged

Cat. No. HP-26197TH **Lot. No.** (See product label)

SPECIFICATION

Product Overview Recombinant fragment, corresponding to amino acids 145-405 of Human Haptoglobin. A single, non-glycosylated, polypeptide chain with a N terminal His tag and having a total MW of 33 kDa.

Species Human

Source E.coli

ProteinLength 145-405 a.a.

Description

This gene encodes a preproprotein, which is processed to yield both alpha and beta chains, which subsequently combine as a tetramer to produce haptoglobin. Haptoglobin functions to bind free plasma hemoglobin, which allows degradative enzymes to gain access to the hemoglobin, while at the same time preventing loss of iron through the kidneys and protecting the kidneys from damage by hemoglobin. Mutations in this gene and/or its regulatory regions cause ahaptoglobinemia or hypohaptoglobinemia. This gene has also been linked to diabetic nephropathy, the incidence of coronary artery disease in type 1 diabetes, Crohns disease, inflammatory disease behavior, primary sclerosing cholangitis, susceptibility to idiopathic Parkinsons disease, and a reduced incidence of Plasmodium falciparum malaria. A similar duplicated gene is located next to this gene on chromosome 16. Multiple transcript variants encoding different isoforms have been found for this gene.

Conjugation HIS

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Tissue specificity	Expressed by the liver and secreted in plasma.
Form	Lyophilised:Reconstitute in sterile 18MΩ/cm water at not less than 100µg/ml, which can then be further diluted to other aqueous solutions.
Purity	>90% by SDS-PAGE
Storage buffer	Preservative: None Constituents: 0.1% SDS, 1mM DTT, PBS.
Storage	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
Sequences of amino acids	KQWINKAVGD KLPECEAVCG KPKNPANPVQ RILGGHLDK GSFPWQAKMVSHHNLTTGAT LINEQWLLTT AKNFLNHSE NATAKDIAPT LTLVVGKKQL VEIEKVVLHP NYSQVDIGLI KLKQKVSNE RVMPICLPSK DYAEVGRVGY VSGWGRNANF KFTDHLKYVM LPVADQDQCI RHYEGSTVPE KKTPKSPVGV QPILNEHTFC AGMSKYQEDT CYGDAGSAFA VHDLEEDTWY ATGILSFDKS CAVAEYGVYV KVTSIQDWVQ KTIAE
Sequence Similarities	Belongs to the peptidase S1 family.Contains 1 peptidase S1 domain.Contains 2 Sushi (CCP/SCR) domains.

GENE INFORMATION

Gene Name	HP haptoglobin [Homo sapiens]
Official Symbol	HP
Synonyms	HP; haptoglobin;
Gene ID	3240

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mRNA Refseq	NM_001126102
Protein Refseq	NP_001119574
MIM	140100
Uniprot ID	P00738
Chromosome Location	16q22.2
Pathway	amb2 Integrin signaling, organism-specific biosystem;
Function	catalytic activity; hemoglobin binding; serine-type endopeptidase activity;

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