

# Recombinant human HFE protein

Catalog Number: ATGP1869

## PRODUCT INFORMATION

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**Expression system**

E.coli

**Domain**

23-306aa

**UniProt No.**

Q30201

**NCBI Accession No.**

NP\_000401.1

**Alternative Names**

Hereditary hemochromatosis protein, HFE1, HH, HLA-H, MVCD7, TFQTL2

## PRODUCT SPECIFICATION

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**Molecular Weight**

35.7 kDa (308aa)

**Concentration**

1mg/ml (determined by Bradford assay)

**Formulation**

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 0.4M urea, 10% glycerol

**Purity**

&gt; 85% by SDS-PAGE

**Tag**

His-Tag

**Application**

SDS-PAGE, Denatured

**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

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**Description**

HFE, also known as HLA-H, belongs to the MHC class I family. This protein contains 1 Ig-like C1-type (immunoglobulin-like) domain. HFE is a membrane protein that is similar to MHC class I-type proteins and associates with beta-2 microglobulin (beta2M). It is thought that this protein functions to regulate iron absorption by regulating the interaction of the transferrin receptor (TFR) with transferrin. It binds to transferrin receptor (TFR) and reduces its affinity for iron-loaded transferrin. Recombinant human HFE protein, fused to His-tag at N-terminus, was expressed in E. coli.

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## Amino acid Sequence

<MGSSHHHHHH SSGLVPRGSH MGSM>RLLRSH SLHYLFMGAS EQDLGLSLFE ALGYVDDQLF VFYDHESRRV  
EP RTPWVSSR ISSQMWLQLS QSLKGWDHMF TVDFWTIMEN HNHSKESHTL QVILGCEMQE DNSTEGYWKY  
GYDGQDHLEF CPDTLDWRAA EPRAWPTKLE WERHKIRARQ NRAYLERDCP AQLQQLLELG RGVLDQQVPP LVKVTHHVTS  
SVTTLRCRAL NYYPQNITMK WLKDKQPMDA KEFEPKDVLP NGDGT YQGW I TLAVPPGEEQ RYTCQVEHPG LDQPLIVIWE  
PSPSGTLV

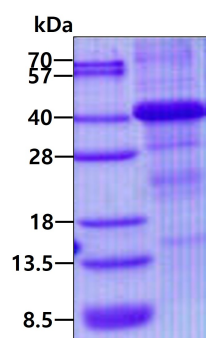
## General References

Feder J.N., et al. (1998) Proc. Natl. Acad. Sci. u.S.A. 95:1472-1477

West, A P, et al. (2000) J. Biol. Chem. (uNITED STATES) 275 (49): 38135-8.

## DATA

### SDS-PAGE



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