

Transferrin Protein, Human (HEK293, His)

Cat. No.:	HY-P70620
Synonyms:	Serotransferrin; Transferrin; Beta-1 metal-binding globulin; Siderophilin; TF; TRF
Species:	Human
Source:	HEK293
Accession:	P02787/AAA61140.1/NP_001054.1 (V20-P698)
Gene ID:	7018
Molecular Weight:	68-87 kDa

PROPERTIES

AA Sequence

V P D K T V R W C A	V S E H E A T K C Q	S F R D H M K S V I	P S D G P S V A C V
K K A S Y L D C I R	A I A A N E A D A V	T L D A G L V Y D A	Y L A P N N L K P V
V A E F Y G S K E D	P Q T F Y Y A V A V	V K K D S G F Q M N	Q L R G K K S C H T
G L G R S A G W N I	P I G L L Y C D L P	E P R K P L E K A V	A N F F S G S C A P
C A D G T D F P Q L	C Q L C P G C G C S	T L N Q Y F G Y S G	A F K C L K D G A G
D V A F V K H S T I	F E N L A N K A D R	D Q Y E L L C L D N	T R K P V D E Y K D
C H L A Q V P S H T	V V A R S M G G K E	D L I W E L L N Q A	Q E H F G K D K S K
E F Q L F S S P H G	K D L L F K D S A H	G F L K V P P R M D	A K M Y L G Y E Y V
T A I R N L R E G T	C P E A P T D E C K	P V K W C A L S H H	E R L K C D E W S V
N S V G K I E C V S	A E T T E D C I A K	I M N G E A D A M S	L D G G F V Y I A G
K C G L V P V L A E	N Y N K S D N C E D	T P E A G Y F A I A	V V K K S A S D L T
W D N L K G K K S C	H T A V G R T A G W	N I P M G L L Y N K	I N H C R F D E F F
S E G C A P G S K K	D S S L C K L C M G	S G L N L C E P N N	K E G Y Y G Y T G A
F R C L V E K G D V	A F V K H Q T V P Q	N T G G K N P D P W	A K N L N E K D Y E
L L C L D G T R K P	V E E Y A N C H L A	R A P N H A V V T R	K D K E A C V H K I
L R Q Q Q H L F G S	N V T D C S G N F C	L F R S E T K D L L	F R D D T V C L A K
L H D R N T Y E K Y	L G E E Y V K A V G	N L R K C S T S S L	L E A C T F R R P

Biological Activity

1. Measured by its binding ability in a functional ELISA. Immobilized Human Transferrin at 2 µg/mL (100 µL/well) can bind Biotinylated Human Transferrin R. The ED₅₀ for this effect is 10.21 ng/mL.

2. Measured by the ability of the immobilized protein to support the adhesion of HEK293 human embryonic kidney cells. The ED₅₀ for this effect is 0.1817 µg/mL, corresponding to a specific activity is 5503.58 units/mg

Appearance

Lyophilized powder

Formulation

Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4 or 20 mM PB, 150 mM NaCl, pH 7.4.

Endotoxin Level

<1 EU/µg, determined by LAL method.

Reconstitution

It is not recommended to reconstitute to a concentration less than 100 µg/mL in ddH₂O. For long term storage it is recommended to add a carrier protein (0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose).

Storage & Stability

Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.

Shipping

Room temperature in continental US; may vary elsewhere.

DESCRIPTION**Background**

Transferrins, as iron-binding transport proteins, have the capacity to bind two Fe(3+) ions in conjunction with an anion, typically bicarbonate. They play a pivotal role in transporting iron from sites of absorption and heme degradation to locations designated for storage and utilization. Additionally, serum transferrin may exert influence over cell proliferation. In the context of microbial infection, transferrin serves as an iron source for Neisseria species, which adeptly capture the protein and extract iron for their own metabolic needs.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA