

Product datasheet

Recombinant human Transferrin protein ab83560

4 Images

Overview

<b>Product name</b>	Recombinant human Transferrin protein
<b>Protein length</b>	Full length protein

Description

<b>Nature</b>	Recombinant
<b>Source</b>	HEK 293 cells

Amino Acid Sequence

<b>Species</b>	Human
<b>Sequence</b>	<p>Theoretical sequence:</p> <p>VPDKTVRWCAVSEHEATKCQSFRDHMKSVIPSDGPSVACVKKASY  L  DCIRAIANEADAVTLDAGLVYDAYLAPNNLKPVVAEFYGSKED  PQTF  YYAVAVVKKDSGFQMNQLRGKKSCHTGLGRSAGWNIPIGLL  YCDLPEP  RKPLEKAVANFFSGSCAPCADGTDFPQLCQLCPGCGCS  TLNQYFGYSG  AFKCLKNGAGDVAFVKHSTIFENLANKADRQYEL  LCLDNTRKPVDEY  KDCHLAQVPSHTVVARSMGGKEDLIWELLNQA  QEHFGKDKSKEFQLFS  SPHGKDLLFKDSAHGFLKVPPRMDAKMYL  GYEYVTAIRNLREGTCQEA  PTDECKPVKWCALSHHERLKCDEWSV  NSVGKIECVSAETTEDCIAKIM  NGEADAMSLDGGFVYIAGKCGLV  PVLAENYNKSDNCEDTPEAGYFAVA  VVKKSASDLTWDNLKGGKSC  HTAVGRTAGWNIPMGLLYNKINHCRFDE  FFSEGCAPGSKKDSSLC  KLCMGSLNLCEPNNKEGYGYTGAFRCLVE  KGDVAFVKHQTPQ  NTGGKNPDPWAKNLNEKDYELLCLDGTRKPVEEY  ANCHLARAPNH</p>

AVVTRKDKEACVHKILRQQQHFLFGSNVTDCSGNFCLF  
RSETKDLL  
FRDDTVCLAKLHDRNTYEKYLGEYVKAVGNLRKCSTSSL  
LEACT FRRP

## Specifications

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Our [Abpromise guarantee](#) covers the use of **ab83560** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

<b>Biological activity</b>	The activity of ab83560 was measured by its ability to support the growth of HepG2 cells under conditions of reduced serum. Typically 0.1 to 1 µg enhances cell proliferation.
<b>Applications</b>	Functional Studies SDS-PAGE
<b>Purity</b>	> 95 % SDS-PAGE.
<b>Form</b>	Lyophilised

## Preparation and Storage

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<b>Stability and Storage</b>	Shipped at 4°C. After reconstitution store at -20°C. Avoid freeze / thaw cycles. Preservative: None Constituents: 10% Trehalose, 1% Human serum albumin This product is an active protein and may elicit a biological response in vivo, handle with caution.
<b>Reconstitution</b>	It is recommended that 0.5 ml of sterile phosphate-buffered saline be added to the vial.

## General Info

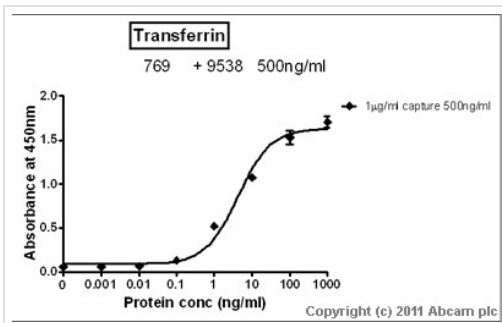
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<b>Function</b>	Transferrins are iron binding transport proteins which can bind two Fe(3+) ions in association with the binding of an anion, usually bicarbonate. It is responsible for the transport of iron from sites of absorption and heme degradation to those of storage and utilization. Serum transferrin may also have a further role in stimulating cell proliferation.
<b>Tissue specificity</b>	Expressed by the liver and secreted in plasma.
<b>Involvement in disease</b>	Defects in TF are the cause of atransferrinemia (ATRAF) [MIM:209300]. Atransferrinemia is rare autosomal recessive disorder characterized by iron overload and hypochromic anemia.
<b>Sequence similarities</b>	Belongs to the transferrin family. Contains 2 transferrin-like domains.
<b>Cellular localization</b>	Secreted.

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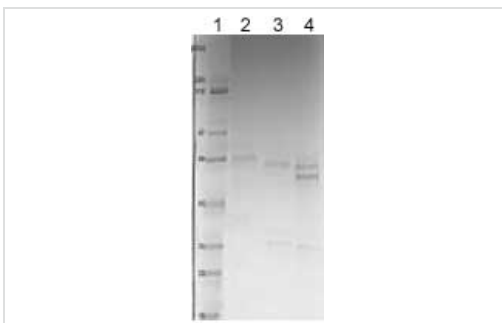
## Images

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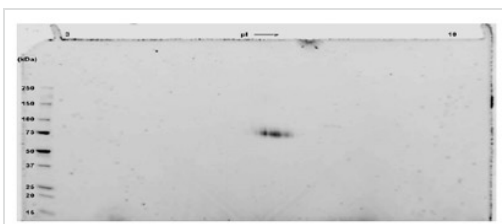
Sandwich ELISA - Transferrin protein (Active)  
(ab83560)

Standard curve for Transferrin (Analyte: [ab83560](#)); dilution range 1pg/ml to 1µg/ml using Capture Antibody [Mouse monoclonal \[HTF-14\] to Transferrin \(ab769\)](#) at 1µg/ml and Detector Antibody [Rabbit polyclonal to Transferrin \(ab9538\)](#) at 0.5µg/ml.



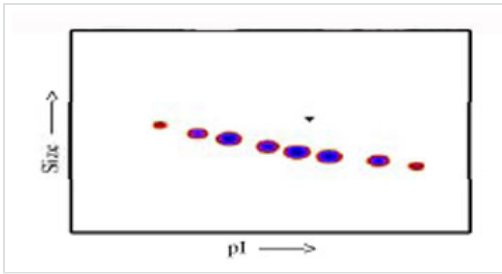
SDS-PAGE - Transferrin protein (Active) (ab83560)

Lane 1 – MW markers; Lane 2 – ab83560; Lane 3 – ab83560 treated with PNGase F to remove potential N-linked glycans; Lane 4 – ab83560 treated with a glycosidase cocktail to remove potential N- and Olinked glycans. Approximately 5 µg of protein was loaded per lane; Gel was stained using Coomassie. Drop in MW after treatment with PNGase F indicates presence of N-linked glycans. A further drop in MW after treatment with the glycosidase cocktail indicates the presence of O-linked glycans. Additional bands in lane 3 and lane 4 are glycosidase enzymes.



SDS-PAGE - Transferrin protein (Active) (ab83560)

A sample of ab83560 without carrier protein was reduced and alkylated and focused on a 3-10 IPG strip then run on a 4-20% Tris HCl 2D gel. Approximately 40 µg of protein was load; Gel was stained using Deep Purple™. Spot train indicates presence of multiple isoforms of Transferrin. Spots within the spot train were cut from the gel and identified as Transferrin by protein mass fingerprinting.



Functional Studies - Transferrin protein (Active)  
(ab83560)

Post-translational modifications result in protein heterogeneity. The densitometry scan demonstrates that ab83560 exists in multiple isoforms, which differ according to their level of posttranslational modification. Expression of these isoforms is highly significant for cell biology, as they more closely resemble the native human proteins. The triangle indicates theoretical pI and MW of the protein.

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