

Product datasheet

Recombinant human Transferrin protein ab83560

4 Images

Overview

Product name	Recombinant human Transferrin protein
Protein length	Full length protein

Description

Nature	Recombinant
Source	HEK 293 cells

Amino Acid Sequence

Species	Human
Sequence	<p>Theoretical sequence:</p> <p>VPDKTVRWCAVSEHEATKCQSFRDHMKSVIPSDGPSVACVKKASY L DCIRAIANEADAVTLDAGLVYDAYLAPNNLKPVVAEFYGSKED PQTF YYAVAVVKKD SGFQMNQLRGKKSCHTGLGRSAGWNIPIGLL YCDLPEP RKPLEKAVANFFSGSCAPCADGTDFPQLCQLCPGCGCS TLNQYFGYSG AFKCLKNGAGDVAFVKHSTIFENLANKADRQYEL LCLDNTRKPVDEY KDCHLAQVPSHTVVARSMGGKEDLIWELLNQA QEHFGKDKSKEFQLFS SPHGKDLLFKDSAHGFLKVPPRMDAKMYL GYEYVTAIRNLREGTCQEA PTDECKPVKWCALSHHERLKCDEWSV NSVGKIECVSAETTEDCIAKIM NGEADAMSLDGGFVYIAGKCGLV PVLAENYNKSDNCEDTPEAGYFAVA VVKKSASDLTWDNLKGGKSC HTAVGRTAGWNIPMGLLYNKINHCRFDE FFSEGCAPGSKKDSSLC KLCMGSGLNLCENNKEGYYGYTGAFRCLVE KGDVAFVKHQVTPQ NTGGKNPDPWAKNLNEKDYELLCLDGTRKPVVEEY ANCHLARAPNH</p>

AVVTRKDKEACVHKILRQQQHLFGSNVTDCSGNFCLF
RSETKDLL
FRDDTVCLAKLHDRNTYEKYLGEEYVKAVGNLRKCSTSSL
LEACT FRRP

Specifications

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.

Biological activity	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.
Applications	Functional Studies SDS-PAGE
Purity	> 95 % SDS-PAGE.
Form	Lyophilised

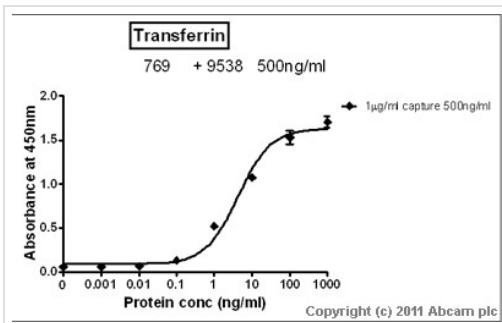
Preparation and Storage

Stability and Storage	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.
Reconstitution	It is recommended that 0.5 ml of sterile phosphate-buffered saline be added to the vial.

General Info

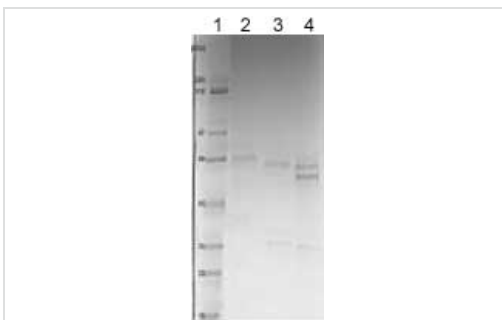
Function	Transferrins are iron binding transport proteins which can bind two Fe(3+) ions in association with the binding of an anion, usually bicarbonate. It is responsible for the transport of iron from sites of absorption and heme degradation to those of storage and utilization. Serum transferrin may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

Images



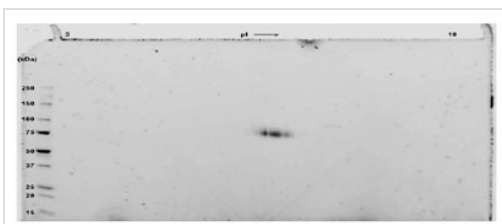
Sandwich ELISA - Transferrin protein (Active)
(ab83560)

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.



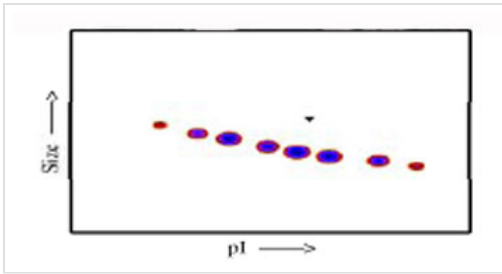
SDS-PAGE - Transferrin protein (Active) (ab83560)

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.

Please note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE"

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <http://www.abcam.com/abpromise> or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors