

Datasheet: 9100-1055

Description:	MOUSE ANTI HUMAN TRANSFERRIN (N-TERMINAL)
Specificity:	TRANSFERRIN (N-TERMINAL)
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	HTF-14
Isotype:	IgG1
Quantity:	0.2 mg

Product Details

RRID AB_2202011

Applications This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
ELISA	▪			
Western Blotting	▪			
Immunofluorescence	▪			
Functional Assays	▪			

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using the appropriate negative/positive controls.

Target Species Human

Species Cross Reactivity Reacts with: Pig, Rabbit, Rat
Does not react with: Sheep, Bovine, Dog, Horse
N.B. Antibody reactivity and working conditions may vary between species.

Product Form Purified IgG - liquid

Preparation Purified IgG prepared by affinity chromatography on Protein A

Buffer Solution Phosphate buffered saline

Preservative Stabilisers 0.09% Sodium Azide (NaN₃)

Approx. Protein Concentrations IgG concentration 1mg/ml

Immunogen Purified porcine transferrin.

**External Database
Links**

UniProt:

[P02787](#) [Related reagents](#)

Entrez Gene:

[7018](#) TF [Related reagents](#)

Specificity

Mouse anti transferrin antibody, clone HTF-14 recognizes the N-terminal domain of human transferrin and has been shown to block binding of transferrin to the transferrin receptor (CD71). Clone HTF-14 is not able to recognize receptor bound transferrin. Clone HTF-14 recognizes a conformational epitope in a loop of the N lobe of transferrin involving the critical Lys-144 residue, also essential for binding of the N lobe to the transferrin receptor ([Mason et al.2009](#)) Transferrin is a 77 kDa plasma protein synthesized by the liver involved with the transport of iron. Each transferrin molecule has two domains, both with facility to carry 2 ferric ions. The iron/transferrin complex is essential for hemoglobin synthesis and certain types of cell division.

Western Blotting

HTF-14 recognises a band of approximately 77kDa under reducing conditions in human plasma.

References

1. Rubikaite, B.I. *et al.* (1989) [Identification of the segment for binding of transferrin using a cellular receptor]. [Mol Biol \(Mosk\). 23: 765-71.](#)
2. Hradilek, A. and Neuwirt, J. (1986) Iron uptake by MOLT 3 cells from transferrin/monoclonal antitransferrin antibody complexes. [Br J Haematol. 62: 21-30.](#)
3. Trebichavsky, I. *et al.* (1987) Monoclonal antibodies against pig transferrin. Blocking and binding activity. [Folia Microbiol \(Praha\). 32: 448-52.](#)
4. Fuchs, O. *et al.* (1988) Non-transferrin donors of iron for heme synthesis in immature erythroid cells. [Biochim Biophys Acta. 969: 158-65.](#)
5. Bártek, J. *et al.* (1985) Phylogenetically more conservative epitopes among monoclonal antibody-defined antigenic sites of human transferrin are involved in receptor binding. [Br J Haematol. 59: 435-41.](#)
6. Penhallow, R.C. *et al.* (1986) Comparative studies of the binding and growth-supportive ability of mammalian transferrins in human cells. [J Cell Physiol. 128: 251-60.](#)
7. Funk, W.D. *et al.* (1990) Expression of the Amino-Terminal Half-Molecule of Human Serum Transferrin in Cultured Cells and Characterization of the Recombinant Protein [Biochemistry. 29: 1654-60.](#)

Storage

Store at +4°C or at -20°C if preferred.
Storage in frost-free freezers is not recommended.
This product should be stored undiluted.
Avoid repeated freezing and thawing as this may denature the antibody.
Should this product contain a precipitate we recommend microcentrifugation before use.

Guarantee

18 months from date of despatch.

**Health And Safety
Information**

Material Safety Datasheet documentation #10040 available at:
10040: <https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf>

Regulatory

For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG IgA IgM (STAR87...) [Alk. Phos.](#), [HRP](#)

Goat Anti Mouse IgG (STAR77...)	HRP
Rabbit Anti Mouse IgG (STAR12...)	RPE
Rabbit Anti Mouse IgG (STAR8...)	DyLight®800
Rabbit Anti Mouse IgG (STAR13...)	HRP
Goat Anti Mouse IgG (STAR76...)	RPE
Goat Anti Mouse IgG (STAR70...)	FITC
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC , HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC
Goat Anti Mouse IgG (H/L) (STAR117...)	Alk. Phos. , DyLight®488 , DyLight®680 , DyLight®800 , FITC , HRP

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA928\)](#)

North & South America	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: antibody_sales_us@bio-rad.com	Worldwide	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: antibody_sales_uk@bio-rad.com	Europe	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody_sales_de@bio-rad.com
----------------------------------	---	------------------	---	---------------	---

'M342472:190110'

Printed on 11 Oct 2019

© 2019 Bio-Rad Laboratories Inc | [Legal](#) | [Imprint](#)