

## Product datasheet

# Human Transferrin Receptor peptide ab101219

[1 References](#)   [1 Image](#)

### Description

<b>Product name</b>	Human Transferrin Receptor peptide
<b>Purity</b>	> 70 % HPLC. 70 - 90% by HPLC
<b>Accession</b>	<b><u>P02786</u></b>
<b>Animal free</b>	No
<b>Nature</b>	Synthetic
<b>Species</b>	Human

### Specifications

Our **Abpromise guarantee** covers the use of **ab101219** in the following tested applications.

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

<b>Applications</b>	Blocking - Blocking peptide for Anti-Transferrin Receptor antibody ( <b><u>ab84036</u></b> )
<b>Form</b>	Liquid
<b>Additional notes</b>	<ul style="list-style-type: none"> <li>- First try to dissolve a small amount of peptide in either water or buffer. The more charged residues on a peptide, the more soluble it is in aqueous solutions.</li> <li>- If the peptide doesn't dissolve try an organic solvent e.g. DMSO, then dilute using water or buffer.</li> <li>- Consider that any solvent used must be compatible with your assay. If a peptide does not dissolve and you need to recover it, lyophilise to remove the solvent.</li> <li>- Gentle warming and sonication can effectively aid peptide solubilisation. If the solution is cloudy or has gelled the peptide may be in suspension rather than solubilised.</li> <li>- Peptides containing cysteine are easily oxidised, so should be prepared in solution just prior to use.</li> </ul>

### Preparation and Storage

<b>Stability and Storage</b>	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.  Information available upon request.
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## General Info

### Function

Cellular uptake of iron occurs via receptor-mediated endocytosis of ligand-occupied transferrin receptor into specialized endosomes. Endosomal acidification leads to iron release. The apotransferrin-receptor complex is then recycled to the cell surface with a return to neutral pH and the concomitant loss of affinity of apotransferrin for its receptor. Transferrin receptor is necessary for development of erythrocytes and the nervous system (By similarity). A second ligand, the hereditary hemochromatosis protein HFE, competes for binding with transferrin for an overlapping C-terminal binding site. Positively regulates T and B cell proliferation through iron uptake (PubMed:26642240).

(Microbial infection) Acts as a receptor for new-world arenaviruses: Guanarito, Junin and Machupo virus.

### Involvement in disease

Immunodeficiency 46

### Sequence similarities

Belongs to the peptidase M28 family. M28B subfamily.

Contains 1 PA (protease associated) domain.

### Post-translational modifications

N- and O-glycosylated, phosphorylated and palmitoylated. The serum form is only glycosylated.

Proteolytically cleaved on Arg-100 to produce the soluble serum form (sTfR).





Palmitoylated on both Cys-62 and Cys-67. Cys-62 seems to be the major site of palmitoylation.

### Cellular localization

Secreted and Cell membrane. Melanosome. Identified by mass spectrometry in melanosome fractions from stage I to stage IV.

## Images

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Human Transferrin Receptor peptide (ab101219)

To learn more about our protein and peptide range click [here](#).

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