# abcam

# Product datasheet

# Human Transferrin Receptor peptide ab101219

# 1 References 1 Image

# **Description**

Product name Human Transferrin Receptor peptide

Purity > 70 % HPLC.

70 - 90% by HPLC

Accession P02786

Animal free No

**Nature** Synthetic

**Species** Human

### **Specifications**

Our <u>Abpromise guarantee</u> 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.

**Applications** Blocking - Blocking peptide for Anti-Transferrin Receptor antibody (<u>ab84036</u>)

Form Liquid

Additional notes - 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.

- If the peptide doesn't dissolve try an organic solvent e.g. DMSO, then dilute using water or

buffer.

- 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.

- 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.

- Peptides containing cysteine are easily oxidised, so should be prepared in solution just prior

to use.

# **Preparation and Storage**

**Stability and Storage** 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 heditary 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

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).

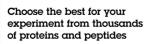
Palmitoylated on both Cys-62 and Cys-67. Cys-62 seems to be the major site of palmitoylation.

**Cellular localization** Secreted and Cell membrane. Melanosome. Identified by mass spectrometry in melanosome

fractions from stage I to stage IV.

#### **Images**

modifications





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Human Transferrin Receptor peptide (ab101219)

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