

## Rabbit CD71/TfR Polyclonal Antibody | anti-TFRC antibody

CD71/TfR Antibody

| CATALOG # | HOST   | REACTIVITY        | APPLICATIONS                                                                       |
|-----------|--------|-------------------|------------------------------------------------------------------------------------|
| AAA321994 | Rabbit | Human, Mouse, Rat | ELISA, Immunocytochemistry, Immunofluorescence, Immunohistochemistry, Western Blot |

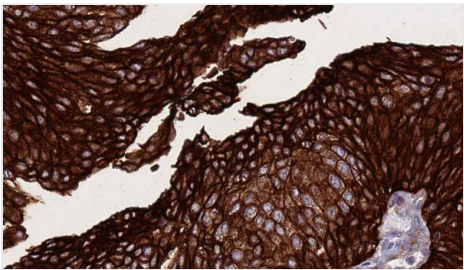
### PRODUCT SYNONYMS

CD71/TfR; Polyclonal Antibody; CD71/TfR Antibody; CD 71; CD71; CD71 antigen; IMD46; OTTHUMP00000208523; OTTHUMP00000208524; OTTHUMP00000208525; p90; sTfR; T9; TFR 1; TfR; TfR1; TFR1\_HUMAN; TFRC; TR; Transferrin receptor (p90 CD71); Transferrin receptor protein 1; serum form; Trfr; anti-TFRC antibody

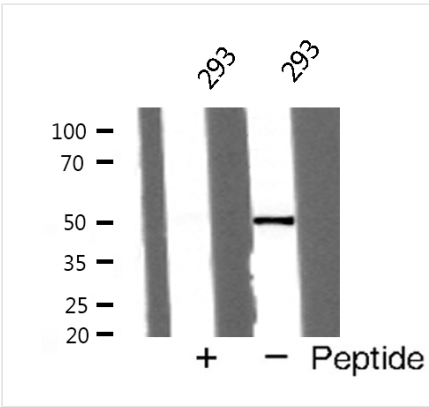
### PRODUCT SPECIFICATIONS

|                                                |                                                                                                                                                                                       |
|------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Host                                           | Rabbit                                                                                                                                                                                |
| Reactivity                                     | Human, Mouse, Rat                                                                                                                                                                     |
| Clonality                                      | Polyclonal                                                                                                                                                                            |
| Isotype                                        | IgG                                                                                                                                                                                   |
| Specificity                                    | CD71/TfR antibody detects endogenous levels of total CD71/TfR                                                                                                                         |
| Purity/Purification                            | The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.                                                                                         |
| Form/Format                                    | Liquid<br>Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.                                                                                         |
| Concentration                                  | 1mg/ml (varies by lot)                                                                                                                                                                |
| Sequence Length                                | 760                                                                                                                                                                                   |
| Applicable Applications for anti-TFRC antibody | ELISA, ICC (Immunocytochemistry), IF (Immunofluorescence), IHC (Immunohistochemistry), WB (Western Blot)                                                                              |
| Immunogen                                      | A synthesized peptide derived from human CD71/TfR                                                                                                                                     |
| Subcellular Location                           | Secreted and Cell Membrane. Melanosome. Identified by mass spectrometry in melanosome fractions from stage I to stage IV.                                                             |
| Tissue Specificity                             | Regulated by cellular iron levels through binding of the iron regulatory proteins, IRP1 and IRP2, to iron-responsive elements in the 3'-UTR. Up-regulated upon mitogenic stimulation. |
| Predicted Cross Reactivity                     | <b>Pig, Bovine, Horse, Sheep, Rabbit, Dog, Chicken</b>                                                                                                                                |
| Similarity                                     | Pig (100%), Bovine (100%), Horse (100%), Sheep (100%), Rabbit (100%), Dog (100%), Chicken (89%)                                                                                       |
| Conjugation                                    | Unconjugated                                                                                                                                                                          |
| Preparation and Storage                        | Store at -20 degree C. Stable for 12 months from date of receipt.                                                                                                                     |

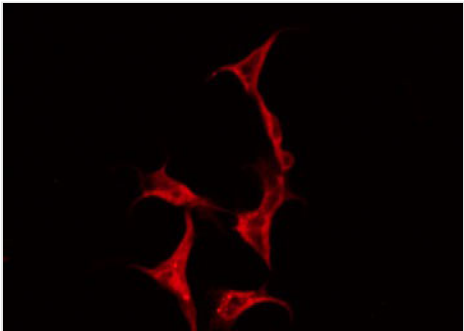
IMAGES



**IHC (Immunohistochemistry)**  
AAA321994 at 1/100 staining Human urothelial cancer tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.



**WB (Western Blot)**  
Western blot analysis of CD71/TfR expression in 293 cell extract



**IF (Immunofluorescence)**  
AAA321994 staining 293 by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25 degree C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37 degree C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) Ab, diluted at 1/600, was used as the secondary antibody.

ADDITIONAL INFORMATION

|                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|-----------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Related Product Information for anti-TFRC antibody</b> | <p><b>Description:</b> Binds the telomeric double-stranded TTAGGG repeat and negatively regulates telomere length. Involved in the regulation of the mitotic spindle. Component of the shelterin complex (telosome) that is involved in the regulation of telomere length and protection.</p> <p><b>Function:</b> 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).</p> <p><b>Subunit Structure:</b> Homodimer; disulfide-linked. Binds one transferrin or HFE molecule per subunit. Binds the HLA class II histocompatibility antigen, DR1. Interacts with SH3BP3. Interacts with STEAP3; facilitates TFRC endocytosis in erythroid precursor cells (PubMed:26642240).</p> <p><b>Post-translational Modifications:</b> 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.</p> <p><b>Similarity:</b> Belongs to the peptidase M28 family. M28B subfamily.</p> |
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NCBI AND UNIPROT INFORMATION

|             |           |
|-------------|-----------|
| NCBI GI #   | 189458819 |
| NCBI GeneID | 7037      |

|                                  |                                                                                                                                                                                                       |
|----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| NCBI Accession #                 | <a href="#">NP_001121620.1</a>                                                                                                                                                                        |
| NCBI GenBank Nucleotide #        | <a href="#">NM_001128148.2</a>                                                                                                                                                                        |
| UniProt Accession #              | <a href="#">P02786</a> ; <a href="#">Q1HE24</a> ; <a href="#">Q59G55</a> ; <a href="#">Q9UCN0</a> ; <a href="#">Q9UCU5</a> ; <a href="#">Q9UDF9</a> ; <a href="#">Q9UK21</a> ; <a href="#">D3DXB0</a> |
| Molecular Weight                 | Observed: 49 kDa<br>Predicted: 85 kDa                                                                                                                                                                 |
| NCBI Official Full Name          | transferrin receptor protein 1 isoform 1                                                                                                                                                              |
| NCBI Official Synonym Full Names | transferrin receptor                                                                                                                                                                                  |
| NCBI Official Symbol             | TFRC                                                                                                                                                                                                  |
| NCBI Official Synonym Symbols    | T9; TR; TFR; p90; CD71; TFR1; TRFR; IMD46                                                                                                                                                             |
| NCBI Protein Information         | transferrin receptor protein 1                                                                                                                                                                        |
| UniProt Protein Name             | Transferrin receptor protein 1                                                                                                                                                                        |
| UniProt Gene Name                | <b>TFRC</b>                                                                                                                                                                                           |
| UniProt Synonym Gene Names       | TR; TfR; TfR1; Trfr; sTfR                                                                                                                                                                             |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/cd71-tfr-antibody-immunocytochemistry-immunofluorescence-immunohistochemistry-western-blot-elisa/321994>