

## Product datasheet for **AM33040PU-N**

### CD71 (TFRC) Mouse Monoclonal Antibody [Clone ID: 66IG10]

#### Product data:

Product Type:	Primary Antibodies
Clone Name:	66IG10
Applications:	FC, IHC, IP, WB
Recommended Dilution:	<b>Western blot</b> (on non reduced antigens). <b>Flow Cytometry.</b> <b>Immunoprecipitation.</b> <b>Immunohistochemistry on Frozen Sections.</b>
Reactivity:	Human
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Human thymocytes (T-cells).
Specificity:	<i>66IG10</i> , raised against Human thymocytes (T-cells) was found to be directed against the Human Transferrin receptor. This antibody reacts with the transferrin receptor, a 180-190 kD transmembrane glycoprotein which exists as a 95 kD homodimer with interchain disulfide bond.
Formulation:	PBS State: Purified State: Liquid purified IgG fraction Preservative: 0.09% Sodium Azide
Concentration:	lot specific
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	85-95 kDa (monomer); 190 kDa (dimer)
Gene Name:	transferrin receptor



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**Database Link:** [Entrez Gene 7037 Human P02786](#)

**Background:** Transferrin receptor protein 1 (TfR1) also known as CD71 (Cluster of Differentiation 71) is a protein that in humans is encoded by the TFRC gene. CD71 plays a critical role in cell proliferation by controlling the supply of iron, which is essential for many metabolic pathways, through the binding and endocytosis of transferrin, the major iron-carrying protein.

The expression of CD71 is regulated at the post-transcriptional level through the control of mRNA stability and is closely linked to intracellular iron levels. Nitric oxide can affect CD71 expression independently of intracellular iron concentration by activating proteins which then stabilize CD71 mRNA.

Expression of CD71, or the transferrin receptor, is very low on resting leukocytes but is upregulated upon activation reflecting the iron dependence of activation. In other tissues, CD71 is expressed on most dividing cells and also on brain endothelium and alveolar macrophage. The ligand is the serum iron transport protein transferrin. CD71 antibodies are used as an indicator of proliferation in the typing of lymphomas and leukemias.

**Synonyms:** TfR1, p90, Transferrin receptor protein 1