

Product datasheet for **BM4087F**

Tfrc Rat Monoclonal Antibody [Clone ID: ER-MP21]

Product data:

Product Type:	Primary Antibodies
Clone Name:	ER-MP21
Applications:	FC, FN, IHC
Recommended Dilution:	Immunohistochemistry on frozen sections: The typical starting working dilution is 1:50. Flow cytometry: The typical starting working dilution is 1:50. Functional assays (inhibition of biological activity). Does not work in Immunohistochemistry on paraffin sections.
Reactivity:	Mouse
Host:	Rat
Isotype:	IgG2a
Clonality:	Monoclonal
Specificity:	This antibody detects CD71.
Formulation:	PBS Label: FITC State: Liquid 0.2 µm filtered Ig fraction Stabilizer: 1% bovine serum
Concentration:	lot specific
Purification:	Protein G
Conjugation:	FITC
Storage:	Store at 2 - 8 °C.
Stability:	Shelf life: one year from despatch.
Gene Name:	transferrin receptor
Database Link:	Entrez Gene 22042 Mouse Q62351



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Background:

CD71 is a 200 kDa glycoprotein composed of two identical, disulfide-linked chains. Each chain is capable of binding transferrin, an iron-transport molecule. Binding of transferrin to its receptor followed by endocytosis of the receptor-ligand complex is a major cellular iron-uptake mechanism. Iron uptake by the proliferating cell is essential for the iron-containing enzyme ribonucleotide reductase involved with DNA synthesis. CD71 is not only expressed by cycling cells, but also by cells that require iron for other iron-dependent proteins, such as the enzyme peroxidase in monocytes. Rapidly proliferating cells, as in malignancy, generally express CD71 abundantly. Furthermore, CD71 has been described as a marker of immature, proliferating T cells.

Synonyms:

TfR1, p90, Transferrin receptor protein 1