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Product datasheet for TA327652

CD71 (TFRC) Mouse Monoclonal Antibody [Clone ID: MRQ-48]

Product data:

Product Type:	Primary Antibodies
Clone Name:	MRQ-48
Applications:	IHC
Recommend Dilution:	IHC: 1:100 - 1:500
Reactivity:	Human
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Formulation:	The antibody is diluted in tris buffered saline, pH 7.3-7.7, with 1% BSA and <1% sodium azide.
Purification:	Affinity purification
Gene Name:	transferrin receptor
Database Link:	NP_003225 Entrez Gene 7037 Human
Synonyms:	CD71; IMD46; p90; T9; TFR; TFR1; TR; TRFR

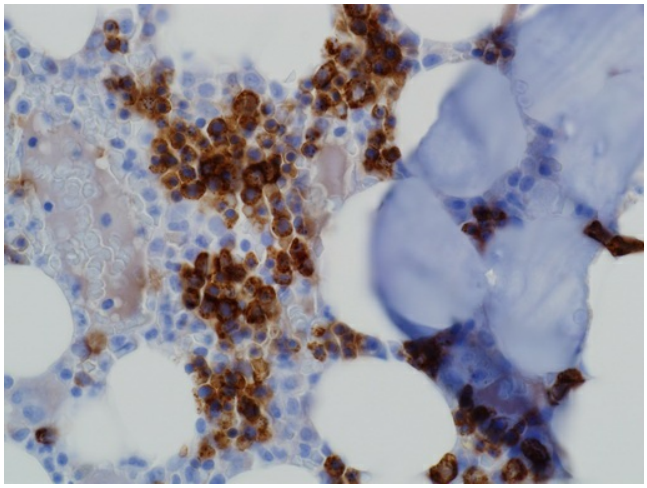
View online »

Note: The transferrin receptor (CD71) is most highly expressed on placental syncytiotrophoblasts, myocytes, basal keratinocytes, hepatocytes, endocrine pancreas, spermatocytes, and erythroid precursors. The level of transferrin receptor expression is highest in early erythroid precursors through the intermediate normoblast phase, after which expression decreases through the reticulocyte phase. The maturation of erythrocytes results in loss of transferrin receptor expression, in concert with down-regulation of the machinery for hemoglobin synthesis. The high level of transferrin receptor within erythroid precursors makes anti-CD71 an excellent marker for evaluation of erythroid precursors within bone marrow biopsy specimens and shows the following features: 1) distinct membranous and cytoplasmic staining pattern, which is easily recognized in bone marrow biopsy; 2) restriction to erythroid lineage within bone marrow biopsy specimens; 3) CD71 expression decreases with the maturation of erythrocytes, with the highest level seen in early forms and the lowest level in late normoblast stage, and most importantly; 4) mature erythrocytes do not express CD71, which facilitates bone marrow analyses. Anti-CD71 is useful in identifying erythroid precursors with very little interference from mature erythrocytes and also in the determination of erythroid leukemia, benign erythroid proliferative disorders, and myelodysplastic syndrome, although further studies are needed for making a definitive diagnosis of myelodysplastic syndrome.

Protein Families: Druggable Genome, ES Cell Differentiation/IPS, Protease, Secreted Protein, Transmembrane

Protein Pathways: Endocytosis, Hematopoietic cell lineage

Product images:



Immunohistochemistry staining of Paraffin Bone marrow tissue by CD71 antibody (dilution: 1:100 - 1:500; visualization of staining: Cytoplasmic, membranous)