

**Mouse Anti-CD71 (Transferrin Receptor) [TFRC/1817]: MC0257, MC0257RTU7**

**Intended Use:** For Research Use Only

**Description:** CD71, the transferrin receptor, is a type II trans-membrane homodimer glycoprotein (180 kDa) involved in the cellular uptake of iron via internalization of iron-loaded transferrin. CD71 is highly expressed in immature erythroid cells, placental tissue and rapidly dividing cells. Loss of CD71 is observed in mature erythrocytes. Over expression of CD71 has also been described for various types of cancers including lung, colon, breast and pancreas. CD71 antibody is useful in identifying erythroid precursors.

**Specifications:**

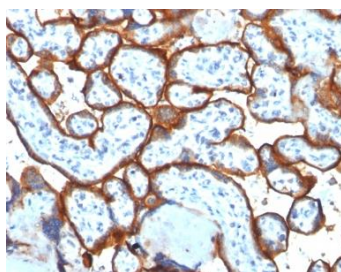
Clone: TFRC/1817  
Source: Mouse  
Isotype: IgG2b/k  
Reactivity: Human  
Localization: Membrane  
Formulation: Antibody in PBS pH7.4, containing BSA and  $\leq 0.09\%$  sodium azide (NaN<sub>3</sub>)  
Storage: Store at 2°- 8°C  
Applications: IHC, ELISA, Flow Cyt., IF  
Package:

Description	Catalog No.	Size
CD71 (Transferrin Receptor) Concentrated	MC0257	1 ml
CD71 (Transferrin Receptor) Prediluted	MC0257RTU7	7 ml

**IHC Procedure\*:**

Positive Control Tissue: Breast cancer, placenta  
Concentrated Dilution: 50-200  
Pretreatment: Tris EDTA pH9.0, 15 minutes using Pressure Cooker, or 30-60 minutes using water bath at 95°-99°C  
Incubation Time and Temp: 30-60 minutes @ RT  
Detection: Refer to the detection system manual

\* Result should be confirmed by an established diagnostic procedure.



FFPE human placenta stained with anti-CD71 using DAB

**References:**

1. HRS-WASH axis governs actin-mediated endosomal recycling and cell invasion. MacDonald E, et al. J Cell Biol 217:2549-2564, 2018.
2. Antibody affinity and valency impact brain uptake of transferrin receptor-targeted gold nanoparticles. Johnsen KB, et al. Theranostics 8:3416-3436, 2018.
3. Noninvasive 89Zr-Transferrin PET Shows Improved Tumor Targeting Compared with 18F-FDG PET in MYC-Overexpressing Human Triple-Negative Breast Cancer. Henry KE, et al. J Nucl Med 59:51-57, 2018.
4. The packing density of a supramolecular membrane protein cluster is controlled by cytoplasmic interactions. Merklinger E, et al. Elife 6:N/A, 2017.

Doc. 100-MC0257  
Rev. A