

## 10-3531: Monoclonal Antibody to mouse CD-71(Discontinued)

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|---------------------------|------------|
| <b>Clonality :</b>        | Monoclonal |
| <b>Clone Name :</b>       | ER-MP21    |
| <b>Application :</b>      | FACS       |
| <b>Reactivity :</b>       | Mouse      |
| <b>Gene :</b>             | Tfrc       |
| <b>Gene ID :</b>          | 22042      |
| <b>Uniprot ID :</b>       | Q62351     |
| <b>Alternative Name :</b> | Trfr, CD71 |
| <b>Isotype :</b>          | Rat IgG2a  |

### Description

The monoclonal antibody ER-MP21 recognizes CD71, the transferrin receptor 1. 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. The monoclonal antibody ER-MP21 inhibits proliferation and differentiation during early T cell development. ER-MP21 recognizes murine CD71, but does not compete with transferrin binding.

### Product Info

|                            |  |
|----------------------------|--|
| <b>Amount :</b>            | 1.0 mg / 500 µg  |
| <b>Content :</b>           | 0.5 mg, 0.2 µm filtered antibody solution in PBS, containing 0.1% bovine serum                         |
| <b>Storage condition :</b> | Product should be stored at 4 °C. Under recommended storage conditions, product is stable for one year |

### Application Note

For immunohistology, and flow cytometry, dilutions to be used depend on detection system applied. It is recommended that users test the reagent and determine their own optimal dilutions. The typical starting working dilution is 1:50. For functional studies, in vitro dilutions have to be optimized in user's experimental setting.