Datasheet: MCA155EL

| Description: | MOUSE ANTI RAT CD71:Low Endotoxin |
| Specificity: | CD71 |
| Other names: | TRANSFERRIN RECEPTOR |
| Format: | Low Endotoxin |
| Product Type: | Monoclonal Antibody |
| Clone: | OX-26 |
| Isotype: | IgG2a |
| Quantity: | 0.5 mg |

**Product Details**

**Applications**

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit [www.abdserotec.com/protocols](http://www.abdserotec.com/protocols).

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<th>Not Determined</th>
<th>Suggested Dilution</th>
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<td>Flow Cytometry</td>
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<td>Immunohistology - Frozen</td>
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Where this antibody has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the antibody for use in their own system using appropriate negative/positive controls.

**Target Species**

Rat

**Product Form**

Purified IgG - liquid

**Preparation**

Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant

**Buffer Solution**

Phosphate buffered saline

**Preservative Stabilisers**

None present.

**Endotoxin Level**

<0.01EU/ug

**Approx. Protein Concentrations**

IgG concentration 1.0 mg/ml

**Immunogen**

PHA activated rat lymphocytes.
Fusion Partners
Spleen cells from immunised Balb/c mice were fused with cells from the NS1 mouse myeloma cell line.

Specificity
**Mouse anti Rat CD71 antibody, clone OX-26** recognizes rat CD71, also known as transferrin receptor, a homodimeric type II transmembrane protein, expressed by all proliferating cells and cells with a requirement for iron, including reticulocytes and capillary endothelium in brain. Clone OX-26 also binds to a number of non-dividing normal tissues.

The balance between a sufficient amount of iron uptake and prevention of accumulation of excess iron within a cell, is vitally important to maintain cellular functions such as oxygen and electron transport and mitochondrial energy metabolism, whilst preventing permanent cell and tissue damage. Transferrin receptor (CD71), transferrin and ferritin have been identified as specialised proteins which control the uptake, transport and storage of free iron in tissues, thereby maintaining iron homeostasis (Crihton et al. 1992).

An imbalance in iron homeostasis within the brain has been linked with the neurodegenerative diseases, Alzheimer’s, Parkinson’s, Huntington’s and Multiple Sclerosis (Benarroch 2009).

Mouse anti rat CD71 clone OX-26 is reported as suitable for use in immunoelectron microscopy (Lipardi et al. 2002). OX-26 detects a band of ~95kDa in Western blotting under reducing conditions and ~195kDa under non-reducing conditions reflecting it's homodimeric structure.

Flow Cytometry
Use 10ul of the suggested working dilution to label 10^6 cells in 100ul.

References

Storage
Store at -20°C only.
Storage in frost-free freezers is not recommended.
This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

Shelf Life
18 months from date of despatch.

Health And Safety Information

Regulatory
For research purposes only

Related Products

**Recommended Secondary Antibodies**

HuCAL Anti Mouse IgG2a (HCA037...)
Rabbit Anti Mouse IgG (STAR8...)
Goat Anti Mouse IgG (STAR76...)
Goat Anti Mouse IgG (STAR77...)
Rabbit Anti Mouse IgG (STAR9...)
Goat Anti Mouse IgG IgA IgM (STAR87...)
Rabbit Anti Mouse IgG (STAR12...)
Rabbit Anti Mouse IgG (STAR13...)
Goat Anti Mouse IgG (Fc) (STAR120...)
Goat Anti Mouse IgG (H/L) (STAR117...)
Goat Anti Mouse IgG (STAR70...)

FITC, HRP
DyLight®800
RPE
HRP
FITC
Aik. Phos., HRP
RPE
HRP
FITC, HRP
Aik. Phos., DyLight®488, DyLight®549, DyLight®649, DyLight®800, FITC, HRP
FITC

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