

## Datasheet: MCA155EL

<b>Description:</b>	MOUSE ANTI RAT CD71:Low Endotoxin
<b>Specificity:</b>	CD71
<b>Other names:</b>	TRANSFERRIN RECEPTOR
<b>Format:</b>	Low Endotoxin
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	OX-26
<b>Isotype:</b>	IgG2a
<b>Quantity:</b>	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.bio-rad-antibodies.com/protocols](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			1/10 - 1/100
Immunohistology - Frozen	▪			
Immunohistology - Paraffin	▪			
ELISA			▪	
Immunoprecipitation			▪	
Western Blotting	▪			
Immunofluorescence	▪			

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.

<b>Target Species</b>	Rat
<b>Product Form</b>	Purified IgG - liquid
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	None present.

<b>Carrier Free</b>	Yes
<b>Endotoxin Level</b>	<0.01EU/ug
<b>Approx. Protein Concentrations</b>	IgG concentration 1.0 mg/ml
<b>Immunogen</b>	PHA activated rat lymphocytes.
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">Q99376</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">64678</a>    Tfrc    <a href="#">Related reagents</a></p>
<b>Synonyms</b>	Tfrc
<b>RRID</b>	AB_2201357
<b>Fusion Partners</b>	Spleen cells from immunised Balb/c mice were fused with cells from the NS1 mouse myeloma cell line.
<b>Specificity</b>	<p><b>Mouse anti Rat CD71 antibody, clone OX-26</b> 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.</p> <p>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 (<a href="#">Crihton et al. 1992</a>).</p> <p>An imbalance in iron homeostasis within the brain has been linked with the neurodegenerative diseases, Alzheimer's, Parkinson's, Huntington's and Multiple Sclerosis (<a href="#">Benarroch 2009</a>).</p> <p>Mouse anti rat CD71 clone OX-26 is reported as suitable for use in immunoelectron microscopy (<a href="#">Lipardi et al. 2002</a>). OX-26 detects a band of ~95kDa in Western blotting under reducing conditions and ~195 kDa under non-reducing conditions reflecting it's homodimeric structure.</p>
<b>Flow Cytometry</b>	Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul.
<b>References</b>	<ol style="list-style-type: none"> <li>1. Jefferies, W.A. <i>et al.</i> (1985) Analysis of lymphopoietic stem cells with a monoclonal antibody to the rat transferrin receptor. <a href="#">Immunology. 54 (2): 333-41.</a></li> <li>2. Yefimova, M.G. <i>et al.</i> (2002) Impaired retinal iron homeostasis associated with defective</li> </ol>

- phagocytosis in Royal College of Surgeons rats. [Invest Ophthalmol Vis Sci. 43 \(2\): 537-45.](#)
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**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.

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**Guarantee** 12 months from date of despatch

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**Health And Safety Information** Material Safety Datasheet documentation #10162 available at:  
10162: <https://www.bio-rad-antibodies.com/uploads/MSDS/10162.pdf>

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**Regulatory** For research purposes only

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## Related Products

### Recommended Secondary Antibodies

Goat Anti Mouse IgG IgA IgM (STAR87...) [Alk. Phos.](#), [HRP](#)  
Goat Anti Mouse IgG (STAR77...) [HRP](#)  
Rabbit Anti Mouse IgG (STAR12...) [RPE](#)  
Rabbit Anti Mouse IgG (STAR8...) [DyLight@800](#)  
Rabbit Anti Mouse IgG (STAR13...) [HRP](#)  
Goat Anti Mouse IgG (STAR76...) [RPE](#)  
Goat Anti Mouse IgG (STAR70...) [FITC](#)  
Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)  
Human Anti Mouse IgG2a (HCA037...) [FITC](#), [HRP](#)  
Goat Anti Mouse IgG (H/L) (STAR117...) [Alk. Phos.](#), [DyLight@488](#), [DyLight@680](#),  
[DyLight@800](#), [FITC](#), [HRP](#)  
Rabbit Anti Mouse IgG (STAR9...) [FITC](#)

### Recommended Negative Controls

[MOUSE IgG2a NEGATIVE CONTROL:Low Endotoxin \(MCA1210EL\)](#)

**North & South** Tel: +1 800 265 7376

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To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://bio-rad-antibodies.com/datasheets)

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