

## Datasheet: MCA155PE

**BATCH NUMBER INN1605**

<b>Description:</b>	MOUSE ANTI RAT CD71:RPE
<b>Specificity:</b>	CD71
<b>Other names:</b>	TRANSFERRIN RECEPTOR
<b>Format:</b>	RPE
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	OX-26
<b>Isotype:</b>	IgG2a
<b>Quantity:</b>	100 TESTS

### 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	▪			Neat

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 conjugated to R. Phycoerythrin (RPE) - lyophilized		
<b>Reconstitution</b>	Reconstitute with 1 ml distilled water		
<b>Max Ex/Em</b>	<b>Fluorophore</b>	<b>Excitation Max (nm)</b>	<b>Emission Max (nm)</b>
	RPE 488nm laser	496	578
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on protein A.		
<b>Buffer Solution</b>	Phosphate buffered saline		
<b>Preservative</b>	0.09% Sodium Azide		
<b>Stabilisers</b>	1%	Bovine Serum Albumin	
	5%	Sucrose	

<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>	Tfrr
<b>RRID</b>	AB_321761
<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 <i>et al.</i> 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 <i>et al.</i> 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 phagocytosis in Royal College of Surgeons rats. <a href="#">Invest Ophthalmol Vis Sci. 43 (2): 537-45.</a></li> <li>3. Jefferies, W.A. <i>et al.</i> (1984) Transferrin receptor on endothelium of brain capillaries. <a href="#">Nature. 312 (5990): 162-3.</a></li> <li>4. Lipardi, C. <i>et al.</i> (2002) Differential recognition of a tyrosine-dependent signal in the basolateral and endocytic pathways of thyroid epithelial cells. <a href="#">Endocrinology. 143 (4):</a></li> </ol>

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**Storage**

Prior to reconstitution store at +4°C. Following reconstitution store at +4°C.

DO NOT FREEZE.

This product should be stored undiluted. This product is photosensitive and should be

protected from light. Should this product contain a precipitate we recommend microcentrifugation before use.

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<b>Guarantee</b>	12 months from date of despatch
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<b>Health And Safety Information</b>	Material Safety Datasheet documentation #20487 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA155PE">https://www.bio-rad-antibodies.com/SDS/MCA155PE</a> 20487
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<b>Regulatory</b>	For research purposes only
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## Related Products

### Recommended Negative Controls

[MOUSE IgG2a NEGATIVE CONTROL:RPE \(MCA1210PE\)](#)

<b>North &amp; South America</b>	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a>	<b>Worldwide</b>	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a>	<b>Europe</b>	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a>
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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)  
'M375334:210104'

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