

## Datasheet: MCA6111F BATCH NUMBER 164945

Description:	MOUSE ANTI HUMAN CD115/CSF1R:FITC
Specificity:	CD115
Other names:	c-fms
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	FER216
lsotype:	lgG1
Quantity:	0.1 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 <u>www.bio-rad-antibodies.com/protocols</u> .						
		Yes No	Not Determined	Suggested Dilution			
	Flow Cytometry	•		Neat - 1/10			
	Where this product 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 product for use in their own system using appropriate negative/positive controls.						
Target Species	Human						
Product Form	Purified IgG conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid						
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)				
	FITC	490	525				
Preparation	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant						
Buffer Solution	Phosphate buffered saline						
Preservative Stabilisers	0.09% Sodium Azide (NaN <sub>3</sub> ) 1% Bovine Serum Albumin						
Approx. Protein	IgG concentration 0.1 n	ng/ml					

## Concentrations

Immunogen	Recombinant protein of the extracellular domain of CSF1R (NP_005202.2, residues 1-514)
External Database Links	UniProt: <u>P07333</u> Related reagents
	Entrez Gene: <u>1436</u> CSF1R <u>Related reagents</u>
Synonyms	FMS
Specificity	<b>Mouse anti Human CD115 antibody, clone FER216</b> recognizes the human CD115 cell surface antigen, also known as M-CSF receptor and c-fms. CD115 plays an important part in regulating the function, differentiation and proliferation of various cell types, with the major site of expression being macrophages. Human CD115 is a 972 amino acid 108 kDa single pass type I transmembrane glycoprotein however as the protein can be heavily modified by post translational modifications, the molecular weight of the receptor can vary significantly.
	The receptor has tyrosine kinase activity and acts as a membrane receptor for M-CSF and IL-34. Activation induces homodimerization, phosphorylation and ubiquitination of intracellular residues triggering kinase signaling pathways.
	CD115 chromosomal and expression abnormalities are involved in the development of Leukoencephalopathy, diffuse hereditary, with spheroids ( <u>HDLS</u> ), a adult-onset rapidly progressive neurodegenerative disorder demonstrating a variety of behavioural, cognitive and motor symptoms. CD115 mutations are also associated with Brain abnormalities, neurodegeneration, and dysosteosclerosis ( <u>BANDDOS</u> ) as well as other pathologies including neoplastic, inflammatory and neurological diseases ( <u>Chitu <i>et al.</i> 2016</u> ).
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul.
References	1. Carreras, J. <i>et al.</i> (2021) Integrative Statistics, Machine Learning and Artificial Intelligence Neural Network Analysis Correlated CSF1R with the Prognosis of Diffuse Large B-Cell Lymphoma <u>Hemato. 2 (2): 182-206.</u>
Storage	This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.
	Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.

Health Ai Informati	on <u>htt</u>	aterial Safety Datas <u>ps://www.bio-rad-ar</u> 041	e at:				
Regulato	<b>ry</b> Fo	r research purpose	es only				
Relate	d Products						
Recommended Negative Controls							
MOUSE IgG1 NEGATIVE CONTROL:FITC (MCA928F)							
North & South America	Tel: +1 800 265 7376 Fax: +1 919 878 3751	Worldwide	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739	Europe	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50		
	Email: antibody_sales	_us@bio-rad.com	Email: antibody_sales_uk@bic	p-rad.com	Email: antibody_sales_de@bio-rad.com		
To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M422030:230831'							
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