

## Datasheet: MCA6111F

<b>Description:</b>	MOUSE ANTI HUMAN CD115/CSF1R:FITC
<b>Specificity:</b>	CD115
<b>Other names:</b>	c-fms
<b>Format:</b>	FITC
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	FER216
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	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 [www.bio-rad-antibodies.com/protocols](http://www.bio-rad-antibodies.com/protocols).

	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.

<b>Target Species</b>	Human		
<b>Product Form</b>	Purified IgG conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid		
<b>Max Ex/Em</b>	<b>Fluorophore</b>	<b>Excitation Max (nm)</b>	<b>Emission Max (nm)</b>
	FITC	490	525
<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>	0.09% Sodium Azide (NaN <sub>3</sub> ) 1% Bovine Serum Albumin		
<b>Approx. Protein Concentrations</b>	IgG concentration 0.1 mg/ml		

**Immunogen** Recombinant protein of the extracellular domain of CSF1R (NP\_005202.2, residues 1-514)

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**External Database Links**

**UniProt:**

[P07333](#)    [Related reagents](#)

**Entrez Gene:**

[1436](#) CSF1R    [Related reagents](#)

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**Synonyms**

FMS

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**Specificity**

**Mouse anti Human CD115 antibody, clone FER216** 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 ([HDLS](#)), 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 ([BANDDOS](#)) as well as other pathologies including neoplastic, inflammatory and neurological diseases ([Chitu et al. 2016](#)).

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**Flow Cytometry**

Use 10ul of the suggested working dilution to label 10<sup>6</sup> cells in 100ul.

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**References**

1. Carreras, J. *et al.* (2021) Integrative Statistics, Machine Learning and Artificial Intelligence Neural Network Analysis Correlated CSF1R with the Prognosis of Diffuse Large B-Cell Lymphoma [Hemato. 2 \(2\): 182-206](#).

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**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.

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**Guarantee**

12 months from date of despatch

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**Health And Safety Information**

Material Safety Datasheet documentation #10041 available at: <https://www.bio-rad-antibodies.com/SDS/MCA6111F>

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**Regulatory**

For research purposes only

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## Related Products

### Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:FITC \(MCA928F\)](#)

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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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