

## PE/Cyanine7 anti-mouse FR4 (Folate Receptor 4) Antibody

<b>Catalog# / Size</b>	125012 / 100 µg
<b>Clone</b>	12A5
<b>Regulatory Status</b>	RUO
<b>Other Names</b>	Folate Receptor 4, FBP, FR δ
<b>Isotype</b>	Rat IgG1, κ
<b>Description</b>	Folate receptor 4 (FR4) is a surface receptor for folic acid (Vitamin B9). It was recently reported that FR4 is highly and constitutively expressed on mouse CD4 <sup>+</sup> CD25 <sup>+</sup> natural regulatory T cells (Treg). The high expression of this surface marker on Treg can be used in combination with CD4 and CD25 to distinguish Treg from other types of T cells. Since FR4 is a surface marker, this antibody may be used in combination with anti-CD4 and/or CD25 to sort living T reg cells for functional studies.

### Product Details

---

<b>Verified Reactivity</b>	Mouse
<b>Antibody Type</b>	Monoclonal
<b>Host Species</b>	Rat
<b>Formulation</b>	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
<b>Preparation</b>	The antibody was purified by affinity chromatography, and conjugated with PE/Cyanine7 under optimal conditions.
<b>Concentration</b>	0.2 mg/ml
<b>Storage &amp; Handling</b>	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. <b>Do not freeze.</b>
<b>Application</b>	<a href="#">FC - Quality tested</a>
<b>Recommended Usage</b>	Each lot of this antibody is quality control tested by <a href="#">immunofluorescent staining with flow cytometric analysis</a> . For flow cytometric staining, the suggested use of this reagent is = 0.25 µg per 10 <sup>6</sup> cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.
<b>Excitation Laser</b>	Blue Laser (488 nm) Green Laser (532 nm)/Yellow-Green Laser (561 nm)
<b>Additional Product Notes</b>	BioLegend is in the process of converting the name PE/Cy7 to PE/Cyanine7. The dye molecule remains the same, so you should expect the same quality and performance from our PE/Cyanine7 products. Please contact <a href="#">Technical Service</a> if you have any questions.
<b>Application References</b>	1. Yamaguchi T <i>et al.</i> 1007: <i>Immunity</i> 27(1)145
<b>(PubMed link indicates BioLegend citation)</b>	
<b>Product Citations</b>	1. Harsha Krovi S, <i>et al.</i> 2020. Nat Commun. 4.790277778. <a href="#">PubMed</a> 2. Watanabe M, <i>et al.</i> 2020. Nat Commun. 4.808333333. <a href="#">PubMed</a>
<b>RRID</b>	AB_1134199 (BioLegend Cat. No. 125012)

### Antigen Details

---

<b>Structure</b>	28 kd protein consisting of 244 amino acids. Heavily glycosylated
------------------	---

<b>Distribution</b>	Expressed on mouse thymocytes and spleen cells. Highly expressed on natural regulatory (Treg) cells
<b>Function</b>	Mediate calcium-independent homophilic cell-cell adhesion
<b>Ligand/Receptor</b>	Folic acid and its derivative
<b>Cell Type</b>	Thymocytes, Tregs
<b>Biology Area</b>	Immunology, Innate Immunity
<b>Antigen References</b>	1. Yamaguchi T <i>et al</i> 2007. <i>Immunity</i> 27:145 2. Spiegelstein O <i>et al.</i> 2000 <i>Gene</i> 258:117
<b>Gene ID</b>	<a href="#">64931</a>

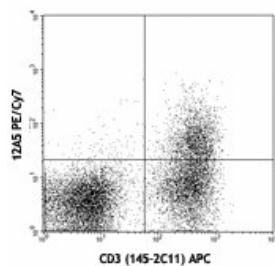
## Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

## Other Formats

PerCP/Cyanine5.5 anti-mouse FR4 (Folate Receptor 4), PE/Dazzle™ 594 anti-mouse FR4 (Folate Receptor 4), APC/Fire™ 750 anti-mouse FR4 (Folate Receptor 4), FITC anti-mouse FR4 (Folate Receptor 4), PE anti-mouse FR4 (Folate Receptor 4), Alexa Fluor® 647 anti-mouse FR4 (Folate Receptor 4), PE/Cyanine7 anti-mouse FR4 (Folate Receptor 4)

## Product Data



C57BL/6 mouse splenocytes stained with CD3 (145-2C11) APC and 12A5 PE/Cyanine7

For research use only. Not for diagnostic use. Not for resale. BioLegend will not be held responsible for patent infringement or other violations that may occur with the use of our products.

\*These products may be covered by one or more Limited Use Label Licenses (see the BioLegend Catalog or our website, [www.biolegend.com/ordering#license](http://www.biolegend.com/ordering#license)). BioLegend products may not be transferred to third parties, resold, modified for resale, or used to manufacture commercial products, reverse engineer functionally similar materials, or to provide a service to third parties without written approval of BioLegend. By use of these products you accept the terms and conditions of all applicable Limited Use Label Licenses. Unless otherwise indicated, these products are for research use only and are not intended for human or animal diagnostic, therapeutic or commercial use.

8999 BioLegend Way, San Diego, CA 92121 [www.biolegend.com](http://www.biolegend.com)  
Toll-Free Phone: 1-877-Bio-Legend (246-5343) Phone: (858) 768-5800 Fax: (877) 455-9587