

## Technical Data Sheet

## FITC Mouse Anti-Rat CD4

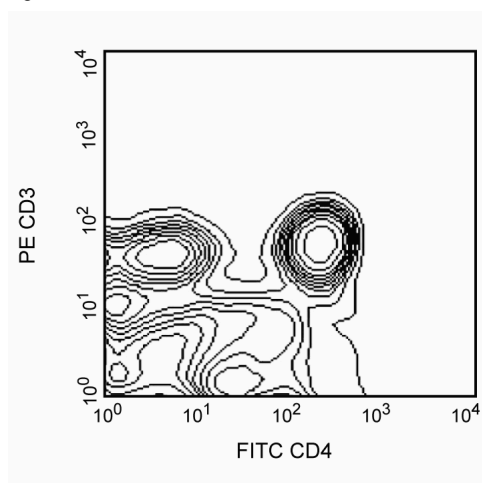
## Product Information

<b>Material Number:</b>	554837
<b>Size:</b>	0.5 mg
<b>Concentration:</b>	0.5 mg/ml
<b>Clone:</b>	OX-35
<b>Immunogen:</b>	Rat T-cell blasts
<b>Isotype:</b>	Mouse (BALB/c) IgG2a, $\kappa$
<b>Reactivity:</b>	QC Testing: Rat
<b>Storage Buffer:</b>	Aqueous buffered solution containing $\leq 0.09\%$ sodium azide.

## Description

The OX-35 clone has been reported to react with the CD4 antigen on most thymocytes, a subpopulation of mature T lymphocytes (i.e. MHC class II-restricted T cells, including most T helper cells), monocytes, macrophages, some dendritic cells, and microglia. CD4 is an antigen coreceptor on the T-cell surface that interacts with MHC class II molecules on antigen-presenting cells. It participates in T-cell activation through its association with the T-cell receptor complex and protein tyrosine kinase lck. The OX-35 clone has been reported to bind to a different epitope of CD4 than that recognized by the W3/25 and OX-38 clones.

This antibody is routinely tested by flow cytometric analysis. Other applications were tested at BD Biosciences Pharmingen during antibody development only or reported in the literature.



**Two-color analysis of the expression of CD4 on rat splenic leukocytes.** Lewis splenocytes were simultaneously stained with FITC-conjugated anti-rat CD4 mAb clone OX-35 and PE-conjugated anti-rat CD3 mAb clone G4.18 (Cat. No. 554833). The CD3-negative CD4-dim cells are the monocyte/macrophage population. Flow cytometry was performed on a BD FACScan™ flow cytometry system.

## Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

The antibody was conjugated with FITC under optimum conditions, and unreacted FITC was removed.

Store undiluted at 4° C and protected from prolonged exposure to light. Do not freeze.

## Application Notes

## Application

Flow cytometry	Routinely Tested
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## Suggested Companion Products

Catalog Number	Name	Size	Clone
553456	FITC Mouse IgG2a, $\kappa$ Isotype Control	0.25 mg	G155-178
554833	PE Mouse Anti-Rat CD3	0.2 mg	G4.18

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## Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
3. For fluorochrome spectra and suitable instrument settings, please refer to our Fluorochrome Web Page at [www.bdbiosciences.com/pharmingen/colors](http://www.bdbiosciences.com/pharmingen/colors).
4. Please refer to [www.bdbiosciences.com/pharmingen/protocols](http://www.bdbiosciences.com/pharmingen/protocols) for technical protocols.

## References

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- Wang CC, Wu CH, Shieh JY, Wen CY, Ling EA. Immunohistochemical study of amoeboid microglial cells in fetal rat brain. *J Anat*. 1996; 189(3):567-574.(Biology)