

## Technical Data Sheet

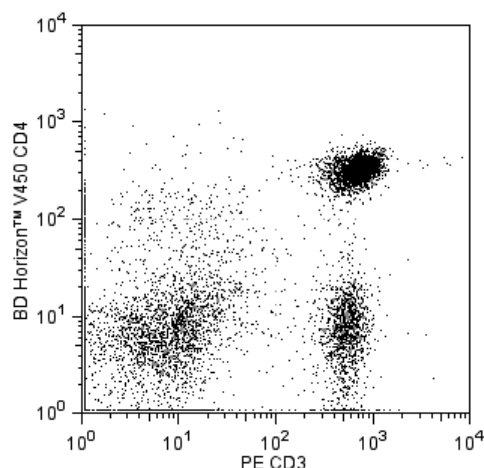
**V450 Mouse Anti-Rat CD4****Product Information**

<b>Material Number:</b>	<b>561579</b>
<b>Alternate Name:</b>	Cd4; CD4 antigen; p55; W3/25 antigen; T-cell surface glycoprotein CD4
<b>Size:</b>	50 µg
<b>Concentration:</b>	0.2 mg/ml
<b>Clone:</b>	OX-35
<b>Immunogen:</b>	Rat T-cell blasts
<b>Isotype:</b>	Mouse (BALB/c) IgG2a, κ
<b>Reactivity:</b>	QC Testing: Rat
<b>Storage Buffer:</b>	Aqueous buffered solution containing protein stabilizer and ≤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.

The antibody is conjugated to BD Horizon™ V450, which has been developed for use in multicolor flow cytometry experiments and is available exclusively from BD Biosciences. It is excited by the Violet laser Ex max of 406 nm and has an Em Max at 450 nm. Conjugates with BD Horizon™ V450 can be used in place of Pacific Blue™ conjugates.



**Multicolor flow cytometric analysis of CD4 expression on rat splenocytes.** Splenocytes from a Lewis rat were stained with the BD Horizon™ V450 Mouse Anti-Rat CD4 antibody (Cat. No. 561579) in conjunction with a PE Mouse Anti-Rat CD3 antibody (Cat. No. 554833). The two-color flow cytometric dot plot shows CD3 versus CD4 expression by cells with the forward and side light-scatter characteristics of viable lymphocytes. Flow cytometry was performed on a BD LSRII™ System.

**Preparation and Storage**

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

The antibody was conjugated with BD Horizon™ V450 under optimum conditions, and unreacted BD Horizon™ V450 was removed.

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

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## Application Notes

### Application

Flow cytometry

Routinely Tested

### Suggested Companion Products

Catalog Number	Name	Size	Clone
554656	Stain Buffer (FBS)	500 ml	(none)
554833	PE Mouse Anti-Rat CD3	0.2 mg	G4.18

### Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to [www.bdbiosciences.com/pharming/en/protocols](http://www.bdbiosciences.com/pharming/en/protocols) for technical protocols.
3. 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.
4. For fluorochrome spectra and suitable instrument settings, please refer to our Fluorochrome Web Page at [www.bdbiosciences.com/colors](http://www.bdbiosciences.com/colors).
5. BD Horizon™ V450 has a maximum absorption of 406 nm and maximum emission of 450 nm. Before staining with this reagent, please confirm that your flow cytometer is capable of exciting the fluorochrome and discriminating the resulting fluorescence.
6. Pacific Blue™ is a trademark of Molecular Probes, Inc., Eugene, OR.

### References

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