Technical Data Sheet

Purified Mouse Anti-Rat CD4

Product Information

Material Number: Alternate Name: Size: Concentration: Clone: Immunogen: Isotype: Reactivity: Storage Buffer:

550296

Cd4; CD4 antigen; p55; W3/25 antigen; T-cell surface glycoprotein CD4 1.0 ml 62.5 μg/ml OX-35 Rat T-cell blasts Mouse (BALB/c) IgG2a, κ QC Testing: Rat Aqueous buffered solution containing BSA, goat serum, 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 it's 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.



Immunohistochemical staining of CD4+ T lymphocytes. Frozen sections of normal rat spleen were stained with the anti-rat CD4 clone OX-35 antibody. CD4+ T lymphocytes in the periarteriolar sheath are identified by the brown staining

Preparation and Storage

Store undiluted at 4°C.

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

Application Notes

Application Routinely Tested Flow cytometry Routinely Tested Immunohistochemistry-frozen Tested During Development Immunohistochemistry-formalin (antigen retrieval required) Not Recommended

Recommended Assay Procedure:

Immunohistochemistry: Clone OX-35 is recommended to test for immunohistochemical staining of acetone-fixed frozen sections of rat spleen and thymus. IHC of formalin-fixed paraffin embedded sections is not recommended. This antibody has been reported to stain the CD4 subset of T lymphocytes. The isotype control recommended for use with this antibody is purified mouse IgG2a (Cat. No. 550339). For optimal indirect immunohistochemical staining, the OX-35 antibody should be titrated (1:10 to 1:50 dilution) and visualized via a three-step staining procedure in combination with biotin conjugated rat anti-mouse IgG2a (Cat. No. 550332) as the secondary antibody and streptravidin-HRP (Cat. No. 550946) together with the DAB detection system (Cat. No. 550880).

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Suggested Companion Products

Catalog Number	Name	Size	Clone	
550339	Purified Mouse IgG2a κ Isotype Control	1.0 ml	C1.18.4	
550332	Biotin Rat Anti-Mouse IgG2a	1.0 ml	R19-15	
550880	DAB Substrate Kit	500 tests	(none)	
550946	Streptavidin HRP	50 ml	(none)	
559148	Antibody Diluent for IHC	125 ml	(none)	

Product Notices

- Since applications vary, each investigator should titrate the reagent to obtain optimal results. 1.
- 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.
- Source of all serum proteins is from USDA inspected abattoirs located in the United States. 3
- This antibody has been developed for the immunohistochemistry application. However, a routine immunohistochemistry test is not 4. performed on every lot. Researchers are encouraged to titrate the reagent for optimal performance.
- 5. An isotype control should be used at the same concentration as the antibody of interest.
- Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols. 6

References

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Jefferies WA, Green JR, Williams AF. Authentic T helper CD4 (W3/25) antigen on rat peritoneal macrophages.. J Exp Med. 1985; 162:117-127. (Immunogen: Immunoprecipitation)

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