Technical Data Sheet

Purified Mouse Anti-Mouse CD247

Product Information

Material Number: 554241
Alternate Name: CD3ζ chain
Size: 0.1 mg
Concentration: 0.5 mg/ml
Clone: 1ζ3A1
Immunogen: Mouse CD3ζ C-terminus synthetic peptide
Isotype: Mouse IgG2b
Reactivity: QC Testing: Mouse
Target MW: 32 kDa
Storage Buffer: Aqueous buffered solution containing ≤0.09% sodium azide.

Description

The T-cell receptor (TCR), expressed by thymus-derived lymphocytes, is a multicomponent complex responsible for recognizing antigen in the context of MHC molecules. T is the antigen-specific binding component of the TCR. On the majority of peripheral T lymphocytes, T is present as a disulfide-linked α-β heterodimer. A minor fraction express T as a γ-δ heterodimer. The T subunits are Ig-like, each containing V and C regions. T is noncovalently associated with an invariant set of molecules referred to as the CD3 subunits. CD3 appears early in thymocyte differentiation and remains expressed on all mature T lymphocytes. In the mouse, it consists of five chains: γ, δ, ε, ζ, and η. The relative masses of the mouse CD3 chains are 21, 28, 26, 32, (dimer) and 21 kDa, respectively. Clone 1ζ3A1 recognizes an epitope in the C-terminus of mouse CD3ζ. A synthetic peptide corresponding to the C-terminus of mouse CD3ζ (BSACDTYDALHMQTLAPR) was used as immunogen. Hybridomas were derived from Balb/c spleen cells x NS-1.

Western blot analysis of CD3ζ. Lysate from mouse thymus was probed with CD3ζ (clone 1ζ3A1 antibody, Cat. No. 554241). CD3ζ is identified as ~32 kDa.

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.
Store undiluted at 4°C.

Application Notes

Application

| Western blot | Routinely Tested |
| Immunoprecipitation | Tested During Development |

Recommended Assay Procedure:

Applications include western blot analysis (1-2 µg/ml) and immunoprecipitation (1-2 µg/1x10⁶ cells). Immunoprecipitation application is not routinely tested, only tested during development.
Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
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.

References