Anti-mouse TCR V beta 8.1/8.2 Monoclonal Antibody (Clone: KJ16) | PA007710.r2a

Catalog No.: PA007710.r2a | **Isotype:** Rat IgG2a Kappa | **Flow Cytometry / IHC Grade**

Recombinant rat anti-mouse TCR V beta 8.1/8.2 monoclonal antibody (Clone KJ16), engineered with a Rat IgG2a Fc domain for flow cytometry, immunofluorescence, and immunohistochemistry assays. Variable regions are derived from the classic rat anti-mouse TCR Vβ 8.1/8.2 clone KJ16 and recombinantly expressed in mammalian cells.

Product Specifications

Catalog No.	PA007710.r2a
Product Name	Recombinant Anti-mouse TCR V beta 8.1/8.2 Monoclonal Antibody (Clone: KJ16), Rat IgG2a Kappa
Synonyms	T cell receptor V beta 8.1, 8.2 chain, TCR V beta 8.1, 8.2
Clone & Isotype	KJ16 | Rat IgG2a Kappa
Applications	Flow cytometry (FC), and Immunohistochemistry - Frozen (IHC-F).
Reactivity & Specificity	Mouse TCR V beta 8.1/8.2. The recombinant rat monoclonal antibody (clone: KJ16) specifically binds to the mouse TCR V beta 8.1/8.2.
Source / Host	The anti-mouse TCR V beta 8.1/8.2 monoclonal antibody (clone: KJ16) was produced in mammalian cells.
Formulation & Conjugate	0.2 uM filtered solution, pH 7.4, no stabilizers or preservatives. Non-conjugated.
Purity	**>95%** by SDS-PAGE under reducing conditions and HPLC.
Shipping	The antibody is shipped with ice pack. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 12 months from date of receipt, -20 to -70°C as supplied. 1 month from date of receipt, 2 to 8°C as supplied.

Biological Description & Background

Recombinant Rat IgG2a Kappa Monoclonal Antibody.

The T cell receptor (TCR) Vβ 8.1 and 8.2 chains are variable elements of the heterodimeric αβ TCR expressed on a major subpopulation of mature T lymphocytes and thymocytes in most mouse strains (such as C57BL/6, BALB/c, C3H, and DBA/2). The TCR Vβ 8 family plays a pivotal role in antigen recognition, superantigen activation (e.g., staphylococcal enterotoxins), and autoimmune disease pathogenesis.

Monoclonal antibody KJ16 specifically recognizes the Vβ 8.1 and Vβ 8.2 T cell receptor chains in mice expressing the Vβ b haplotype. Recombinantly produced in mammalian cells with a Rat IgG2a framework, clone KJ16 is an invaluable tool for profiling T cell repertoire dynamics, analyzing superantigen-mediated T cell expansion/deletion, and tracking specific T cell subsets in flow cytometry and immunohistochemistry assays.

Ordering & Technical Support

For custom volume ordering or inquiries, please visit the product webpage or contact our support team:

- **Product Webpage:** https://www.ushelf.com/anti-mouse-tcr-v-beta-8-1-8-2-monoclonal-antibody-pa007710-r2a/
- **Order Phone:** 1-617-401-8149 | **Fax:** 1-617-606-5022
- **Support Email:** message@sydlabs.com