

Technical Data Sheet

BV480 Hamster Anti-Mouse TCR V#3

Product Information

Material Number:	746797
Size:	50 µg
Clone:	KJ25
Alternative Name:	TCR V beta 3; TCR Vβ3
Reactivity:	Mouse (Tested in Development)
Isotype:	Armenian Hamster IgG2, κ
Immunogen:	αβ TCR purified from mouse T-cell hybridoma 2B4.6
Application:	Flow cytometry (Qualified)
Concentration:	0.2 mg/ml
Storage Buffer:	Aqueous buffered solution containing ≤0.09% sodium azide.
Regulatory Status:	RUO

Description

The KJ25 antibody specifically reacts with the Vβ 3 T-cell Receptor (TCR) of strains having the a (e.g., C57BR, SJL), b (e.g., AKR, CBA/Ca, C57BL, DBA/1), and c (e.g., RIII) haplotypes of the Tcrb gene complex. Vβ 3 TCR-bearing T lymphocytes are clonally eliminated either completely or partially in mice expressing superantigens encoded by the Mtv-1 (Mls-4[a], Mls[c]), Mtv-3 (Mls[c]), Mtv-6 (Mls-3[a], Mls[c]), Mtv-13 (Mls-2[a], Mls[c]), Mtv-27 , Mtv-44 , and/or Mtv-MAI endogenous proviruses (e.g., A, BALB/c, CBA/J, C3H/He, DBA/2, NZB, NZW). Vβ 3 TCR-bearing T cells are activated by the superantigenic Staphylococcal Enterotoxins A and B. Activation or elimination of Vβ 3 TCR-expressing T cells by these determinants is partially dependent upon presentation by I-E. This hamster mAb to a mouse leukocyte antigen does not cross-react with rat leukocytes.

The antibody was conjugated to BD Horizon™ BV480 which is part of the BD Horizon Brilliant™ Violet family of dyes. With an Ex Max of 436-nm and Em Max at 478-nm, BD Horizon BV480 can be excited by the violet laser and detected in the BD Horizon BV510 (525/40-nm) filter set. BV480 has less spillover into the BV605 detector and, in general, is brighter than BV510.

Preparation and Storage Section

Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze. The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography. The antibody was conjugated with BD Horizon BV480 under optimal conditions that minimize unconjugated dye and antibody.

Recommended Assay Procedure

For optimal and reproducible results, BD Horizon Brilliant Stain Buffer should be used anytime two or more BD Horizon Brilliant dyes (including BD OptiBuild Brilliant reagents) are used in the same experiment. Fluorescent dye interactions may cause staining artifacts which may affect data interpretation. The BD Horizon Brilliant Stain Buffer was designed to minimize these interactions. More information can be found in the Technical Data Sheet of the BD Horizon Brilliant Stain Buffer (Cat. No. 563794).

Suggested Companion Products

Catalog Number	Name	Size	Clone
554656	Stain Buffer (FBS) RUO	500 mL	
554657	Stain Buffer (BSA) RUO	500 mL	
563794	Brilliant Stain Buffer RUO	100 Tests	
555899	Lysing Buffer RUO	100 mL	
553141	Purified Rat Anti-Mouse CD16/CD32 (Mouse BD Fc Block™) 2.4G2 RUO	0.1 mg	

Product Notices

1. This antibody was developed for use in flow cytometry.

2. The production process underwent stringent testing and validation to assure that it generates a high-quality conjugate with consistent performance and specific binding activity. However, verification testing has not been performed on all conjugate lots.
3. Researchers should determine the optimal concentration of this reagent for their individual applications.
4. An isotype control should be used at the same concentration as the antibody of interest.
5. 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.
6. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.
7. Please refer to www.bdbiosciences.com/us/s/resources for technical protocols.
8. BD Horizon Brilliant Stain Buffer is covered by one or more of the following US patents: 8,110,673; 8,158,444; 8,575,303; 8,354,239.
9. BD Horizon Brilliant Violet 480 is covered by one or more of the following US patents: 8,575,303; 8,354,239.

References

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