

Technical Data Sheet

BUV563 Hamster Anti-Mouse CD95

Product Information

Material Number:	741292
Size:	50 µg
Clone:	Jo2
Alternative Name:	Apo-1; Apt1; Fas; FASLG receptor; lpr; TNFR6; Tnfrsf6; TNFR6
Reactivity:	Mouse (Tested in Development)
Isotype:	Armenian Hamster IgG2, λ2
Immunogen:	WR19L mouse lymphoma cells transformed with recombinant mouse Fas
Application:	Flow cytometry (Qualified)
Concentration:	0.2 mg/ml
Entrez Gene ID:	14102
Storage Buffer:	Aqueous buffered solution containing ≤0.09% sodium azide.
Regulatory Status:	RUO

Description

Fas antigen, CD95, is a 45 kDa cell-surface protein which can mediate apoptosis. It belongs to the TNF (tumor necrosis factor)/NGF receptor family. Expression of Fas has been described in the thymus, liver, heart, lung and ovary. Fas plays an important role in the apoptotic process that takes place during development. Monoclonal antibodies recognizing Fas such as Jo2 have cytolytic activity on cells expressing Fas. The cell death stimulated by Fas antibodies is characteristic of apoptosis and suggests that the lethal effects are a result of interaction of antibody with a functional Fas antigen as opposed to complement-mediated lysis.

The Jo2 antibody recognizes mouse Fas. The Jo2 antibody shows cytolytic activity against cell lines expressing mouse Fas by inducing apoptosis. Intraperitoneal injections of Jo2 mAb have been shown to kill mice and induce apoptotic hepatocyte death. Jo2 mAb has been reported to immunoprecipitate mouse Fas as a 45 kDa band from W4 cells. W4 cells are WR19L mouse lymphoma cells transformed with mouse Fas. The difference between the observed MW of Fas and that deduced from its amino acid sequence (Mr 34,971) may be due to glycosylation.

The antibody was conjugated to BD Horizon™ BUV563 which is part of the BD Horizon Brilliant™ Ultraviolet family of dyes. This dye is a tandem fluorochrome of BD Horizon BUV395 which has an Ex Max of 348 nm and an acceptor dye. The tandem has an Em Max at 563 nm. BD Horizon BUV563 can be excited by the 355 nm ultraviolet laser. On instruments with a 561 nm Yellow-Green laser, the recommended bandpass filter is 585/15 nm with a 535 nm long pass to minimize laser light leakage. When BD Horizon BUV563 is used with an instrument that does not have a 561 nm laser, a 560/40 nm filter with a 535 nm long pass may be more optimal. Due to the excitation and emission characteristics of the acceptor dye, there may be spillover into the PE and PE-CF594 detectors. However, the spillover can be corrected through compensation as with any other dye combination.

Preparation and Storage

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 BUV563 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)	500 mL	

554657	Stain Buffer (BSA)	500 mL	
563794	Brilliant Stain Buffer	100 Tests	
555899	Lysing Buffer	100 mL	
553141	Purified Rat Anti-Mouse CD16/CD32 (Mouse BD Fc Block™)	0.1 mg	2.4G2

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 wwwbdbiosciences.com/colors.
7. Please refer to wwwbdbiosciences.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.

References

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