

Technical Data Sheet

BUV737 Mouse Anti-Rat Crry/p65

Product Information

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|-------------------|---|
| Material Number: | 748483 |
| Size: | 50 µg |
| Clone: | 512 |
| Alternative Name: | Cr1; Crry; Cr11 |
| Reactivity: | Mouse (Tested in Development) |
| Isotype: | Mouse BALB/c IgG1, κ |
| Immunogen: | Neuraminidase-treated rat peripheral blood erythrocytes |
| Application: | Flow cytometry (Qualified) |
| Concentration: | 0.2 mg/ml |
| Storage Buffer: | Aqueous buffered solution containing ≤0.09% sodium azide. |

Description

The 512 monoclonal antibody specifically recognizes a 65-kDa and 55-kDa molecules of the erythrocyte membrane, which are the rat counterpart of mouse Crry/p65, a membrane inhibitor of complement component C3 convertase. Crry/p65 is widely distributed, predominantly expressed on endothelial cells and all circulating cells. This molecule was also detected on immature hepatocytes, systemic endothelial cells, skin fibroblasts, bronchial epithelial cells, bile canaliculi, the Schwann sheath of peripheral nerve fibers, and ependymal cells. Mouse Crry/p65 uses the same mechanisms as human D eacy- A ccelerating F actor (DAF) and human M embrane C ofactor P rotein (MCP) in inhibiting C3 and C5 convertases, but it is not homologous to either DAF or MCP. It has been proposed that Crry/p65 is the mouse genetic homologue of human CR1 (CD35).

The antibody was conjugated to BD Horizon™ BUV737 which is part of the BD Horizon Brilliant™ Ultraviolet family of dyes. This dye is a tandem fluorochrome of BD Horizon BUV395 with an Ex Max of 348-nm and an acceptor dye with an Em Max at 737-nm. BD Horizon Brilliant BUV737 can be excited by the ultraviolet laser (355 nm) and detected with a 740/35 filter. Due to the excitation of the acceptor dye by other laser lines, there may be significant spillover into channels detecting Alexa Fluor® 700-like dyes (eg, 712/20-nm filter).

Due to spectral differences between labeled cells and beads, using BD™ CompBeads can result in incorrect spillover values when used with BD Horizon BUV737 reagents. Therefore, the use of BD CompBeads or BD CompBeads Plus to determine spillover values for these reagents is not recommended. Different BUV737 reagents (eg, CD4 vs. CD45) can have slightly different fluorescence spillover therefore, it may also be necessary to use clone specific compensation controls when using these reagents.

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 BUV737 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 |
|----------------|--|--------|-------|
| 612758 | BUV737 Mouse IgG1, κ Isotype Control X40 RUO | 50 µg | |
| 550270 | Purified Mouse Anti-Rat CD32 D34-485 RUO | 0.1 mg | |
| 565804 | Red Nucleic Acid Stain RUO | 0.5 mL | |
| 554656 | Stain Buffer (FBS) RUO | 500 mL | |
| 554657 | Stain Buffer (BSA) RUO | 500 mL | |

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.
9. BD Horizon Brilliant Ultraviolet 737 is covered by one or more of the following US patents: 8,110,673; 8,158,444; 8,227,187; 8,575,303; 8,354,239.

References

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- Li B, Sallee C, Dehoff M, Foley S, Molina H, Holers VM. Mouse Crry/p65. Characterization of monoclonal antibodies and the tissue distribution of a functional homologue of human MCP and DAF. *J Immunol*. 1993; 151(8):4295-4305. (Biology: Flow cytometry).
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