

Monoclonal Anti-*Babesia microti* Surface Antigen 1 (BmSA1), Clone RD167 (produced *in vitro*)

Catalog No. NR-53740

Product Description:

Antibody Class: IgG3k

Monoclonal antibody prepared against the surface antigen 1 (BmSA1) of *Babesia microti* (*B. microti*) was purified from the supernatant of clone RD167 hybridoma, adapted to serum-free media, by protein G affinity chromatography. The B cell hybridoma was generated by the fusion of mouse myeloma cells with splenocytes from immunized mice.

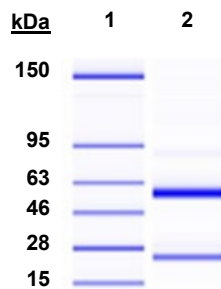
Lot: 70038448

Manufacturing Date: 22APR2021

TEST	SPECIFICATIONS	RESULTS
Antibody Class Determination	Report results	IgG3k
Agilent Protein 230 Analysis	Correct molecular weight (MW) for heavy and light chains; Report purity	Correct molecular weight (MW) for heavy and light chains (Figure 1) 96.4% pure
Average Purity		
Concentration by Spectrophotometer at OD₂₈₀	~ 1 mg per mL	1.2 mg per mL
Functional Activity by Immunofluorescence Assay¹		
<i>B. microti</i> -infected Golden Syrian hamster red blood cells with NR-53740	Reactive	Reactive (Figure 2)
<i>B. microti</i> -infected Golden Syrian hamster red blood cells with Alexa-Fluor™-488-conjugated goat anti-mouse IgG	Non-reactive	Non-reactive; no specific staining of parasites
Sterility	0.22 µm filter-sterilized	0.22 µm filter-sterilized

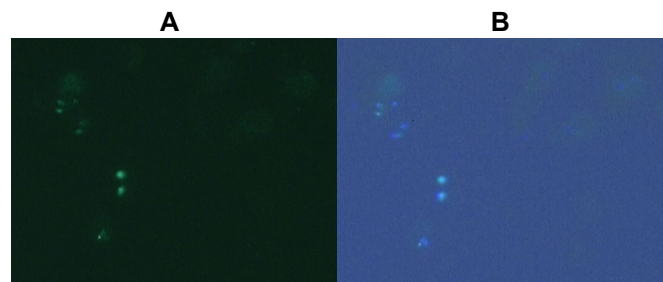
¹Specific labeling of *B. microti* cells with NR-53740 and Alexa-Fluor™-488-conjugated goat anti-mouse IgG (Invitrogen™ A11001) was observed after infection of an immunosuppressed Golden Syrian hamster with *Babesia microti* (ATCC® 30221™) for 30 days (Figure 2). NR-53710 was used at a dilution of 1:500, followed by Alexa-Fluor™-488-conjugated goat anti-mouse IgG as secondary antibody (1:2000).

Figure 1: Agilent Protein 230 Analysis



Lane 1: Molecular Weight Markers
Lane 2: NR-53740

Figure 2: Immunofluorescence Assay of *B. microti*-Infected Hamster Blood Cells



A: Labeling of Golden Syrian hamster red blood cells with NR-53740 and Alexa-Fluor™-488-conjugated goat anti-mouse IgG
B: Image from Figure 2A with overlaid 4',6-diamidino-2-phenylindole (DAPI)-stained image

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07 FEB 2023

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