

***Cryptosporidium* Hyperimmune Bovine Colostrum**

Catalog No. ARP-1672

This reagent is the tangible property of the U.S. Government.

Lot No. 9/14/1992

Manufacturing Date: 14SEP1992

For research use only. Not for human use.

Contributor:

Joseph H. Crabb, Ph.D., ImmuCell Corporation, Portland, Maine, USA; Ogden BioServices Corporation, Rockville, Maryland, USA; and Bruce K. Brown, Project Director, National Institutes of Health AIDS Reagent Program, Germantown, Maryland, USA

Manufacturer:

Joseph H. Crabb, Ph.D., ImmuCell Corporation, Portland, Maine, USA

Product Description:

ARP-1672 contains *Cryptosporidium* hyperimmune colostrum produced in a pregnant cow. Treatment with bovine colostrum hyperimmune to *Cryptosporidium* is effective for prophylaxis and reduction of *Cryptosporidium*-associated diarrhea.^{1,2}

Material Provided:

Each vial contains approximately 35 mL of *Cryptosporidium* hyperimmune bovine colostrum.

Packaging/Storage:

ARP-1672 was packaged aseptically in plastic tubes. The product is provided frozen on dry ice and should be stored at -80°C or colder immediately upon arrival. Freeze-thaw cycles should be minimized.

Functional Activity:

ARP-1672 gave an anti-*Cryptosporidium* (oocyst/sporozyte) ELISA titer of 260,000 ± 23,000, gave an IgG concentration of 40.8 mg per mL by non-reducing SDS-PAGE and scanning densitometry, and displayed strong oocyst and sporozoite reactivity by immunofluorescence. Viability was demonstrated with a total plate count of 231 colony forming units (cfu) per mL, with *Escherichia coli* and *Salmonella* both yielding < 1 cfu per mL. Efficacy was demonstrated in a calf challenge/prophylaxis model of cryptosporidiosis and in an adult BALB/c (nu/nu) model of chronic cryptosporidiosis.

Citation:

Acknowledgment for publications should read "The following reagent was provided by the NIH AIDS Reagent Program for distribution by BEI Resources, NIAID, NIH: *Cryptosporidium*

Hyperimmune Bovine Colostrum, ARP-1672, contributed by Dr. Joseph H. Crabb."

Biosafety Level: 2

Appropriate safety procedures should always be used with this material. Laboratory safety is discussed in the following publication: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, and National Institutes of Health. Biosafety in Microbiological and Biomedical Laboratories. 5th ed. Washington, DC: U.S. Government Printing Office, 2009; see www.cdc.gov/biosafety/publications/bmbl5/index.htm.

Disclaimers:

You are authorized to use this product for research use only. It is not intended for human use.

Use of this product is subject to the terms and conditions of the BEI Resources Material Transfer Agreement (MTA). The MTA is available on our Web site at www.beiresources.org.

While BEI Resources uses reasonable efforts to include accurate and up-to-date information on this product sheet, neither ATCC® nor the U.S. Government makes any warranties or representations as to its accuracy. Citations from scientific literature and patents are provided for informational purposes only. Neither ATCC® nor the U.S. Government warrants that such information has been confirmed to be accurate.

This product is sent with the condition that you are responsible for its safe storage, handling, use and disposal. ATCC® and the U.S. Government are not liable for any damages or injuries arising from receipt and/or use of this product. While reasonable effort is made to ensure authenticity and reliability of materials on deposit, the U.S. Government, ATCC®, their suppliers and contributors to BEI Resources are not liable for damages arising from the misidentification or misrepresentation of products.

Use Restrictions:

This material is distributed for internal research, non-commercial purposes only. This material, its product or its derivatives may not be distributed to third parties. Except as performed under a U.S. Government contract, individuals contemplating commercial use of the material, its products or its derivatives must contact the contributor to determine if a license is required. U.S. Government contractors may need a license before first commercial sale.

References:

1. Ungar, B. L., et al. "Cessation of *Cryptosporidium*-Associated Diarrhea in an Acquired Immunodeficiency Syndrome Patient after Treatment with Hyperimmune Bovine Colostrum." Gastroenterology 98 (1990): 486-489. PubMed: 2295405.
2. Fayer, R., et al. "Efficacy of Hyperimmune Bovine Colostrum for Prophylaxis of Cryptosporidiosis in

Neonatal Calves." J. Parasitol. 75 (1989): 393-397.
PubMed: 2723925.

ATCC® is a trademark of the American Type Culture Collection.

