

***Mycobacterium tuberculosis*, Strain H37Rv, Extracellular Vesicle-Depleted Culture Filtrate Proteins**

**Catalog No. NR-52723**

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**For research use only. Not for use in humans.**

**Contributor and Manufacturer:**

Karen Dobos, Ph.D., Colorado State University, Fort Collins, Colorado, USA

**Product Description:**

NR-52723 is a preparation of extracellular vesicle (EV)-depleted culture filtrate proteins (CFP) from *Mycobacterium tuberculosis* (*M. tuberculosis*), strain H37Rv. Mycobacterial EVs are involved in disease pathogenesis through host-pathogen interactions, including modulation of immune response and virulence, and may have potential as disease biomarkers and in vaccine and therapeutic development.<sup>1,2,3</sup>

The culture was grown to late log phase in glycerol-alanine-salts medium. The culture supernatant was harvested from the live cells and the resulting CFP passed through a 100 kDa ultrafiltration device to remove extracellular vesicles and other large protein aggregates. Protein was quantitated by bicinchoninic acid (BCA) assay.

**Material Provided:**

Each vial of NR-52723 contains approximately 250 µg of extracellular vesicle-depleted culture filtrate proteins from *M. tuberculosis*, strain H37Rv in 10 mM ammonium bicarbonate.

**Packaging/Storage:**

NR-52723 was packaged aseptically in cryovials. The product is provided frozen on blue ice and should be stored at 4°C or colder immediately upon arrival. Freeze-thaw cycles should be avoided.

**Note:** The long-term stability of NR-52723 has not yet been determined.

**Citation:**

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: *Mycobacterium tuberculosis*, Strain H37Rv, Extracellular Vesicle-Depleted Culture Filtrate Proteins, NR-52723."

**Biosafety Level: 1**

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. 6th ed.

Washington, DC: U.S. Government Printing Office, 2020; see [www.cdc.gov/biosafety/publications/bmb15/index.htm](http://www.cdc.gov/biosafety/publications/bmb15/index.htm).

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**References:**

1. Wang, J., et al. "Extracellular Vesicles in Mycobacterial Infections: Their Potential as Molecule Transfer Vectors." Front. Immunol. 10 (2019): 1929. PubMed: 31474995.
2. Gupta, S. and G. M. Rodriguez. "Mycobacterial Extracellular Vesicles and Host Pathogen Interactions." Pathog. Dis. 76 (2018): fty031. PubMed: 29722822.
3. Rodrigues, M., et al. "Roles of Extracellular Vesicles in Viral and Bacterial Infections: Pathogenesis, Diagnostics, and Therapeutics." Theranostics 8 (2018): 2709-2721. PubMed: 29774070.

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