

Human Complement (pooled Normal Human Serum)

Product Description

Human Serum Complement is intended for use in determining the levels of *in vitro* complement activation or complement cytotoxicity. Complement proteins will quickly degrade if the serum is not prepared and stored correctly. LSP complement-preserved serum is derived from the separation of the cellular components of spontaneously clotted whole blood. Freshly collected and flash frozen to preserve complement activity.

Applications

Human complement is used to monitor *in vitro* complement activation. Applications include:

- Biocompatibility experiments such as in drug development
- Biomaterials testing

Specifications

Normal Human Off clot Serum is aseptically collected from normal, healthy donors and flash frozen after collection and kept at -60°C or below at all times to help preserve complement activity.

Country of Origin	US origin
Viral Testing	All materials tested and found to be non-reactive for HBsAG, HIV, HIV-1 p24 antigen and HCV at the time of donation or thereafter by currently approved U.S.A. FDA methods. <u>HSC-101F-US</u> : This material has been tested by an FDA approved test and found to be negative for Chagas, HBsAG, HBVNAT, HIV 1/2, HIV-1 NAT, HCV, HCV-NAT, Syphilis and WNV.

Product Information

Product Code	Product Description	Pack Size
HSC-101G-US	Human Serum Complement , frozen - US origin	1 mL
HSC-101F-US	Human Serum Complement , frozen - US origin	5 mL
HSC-101E-US	Human Serum Complement , frozen - US origin	10 mL
HSC-101C-US	Human Serum Complement , frozen - US origin	50 mL
HSC-101B-US	Human Serum Complement , frozen - US origin	100 mL

Presentation

Pooled Off-the-clot serum derived from the separation of the cellular components of spontaneously clotted whole blood. Freshly collected and flash frozen to preserve complement activity.

Shelf life

Complement has a shelf life of 3 years from the date of collection, provided it is stored appropriately. We would recommend enquiring about the shelf life of each available batch if it is important to have a long shelf life following purchase.

Storage & Handling

Recommended storage is -70°C.

Thaw the complement by incubating in an **ice bath**. Do not subject complement to temperatures above 4°C. Use within one hour of thawing. If complement is to be used and refrozen, aliquot immediately into single use quantities and freeze quickly. Store at -70°C until use. Aliquots should be dated and the activity checked before use.

Do not store or refreeze partially used serum as degradation is rapid if microbial contamination occurs. All biological material should be handled as potentially infectious. It is essential that universal precautions should be employed when handling all Human serum.

Please note: whilst it is possible to perceive differences in the appearance of different batches of human serum, LSP goes to great lengths to ensure that the collection and handling process result in a highly consistent product. Differences in appearance can be largely attributed to the variation in human diet, and in particular to dietary fats. In addition, slight differences in appearance can result from the inconsistent storage and/or handling of the material once in the laboratory. Since human serum is especially sensitive compared with other sources of serum, it is essential that particular attention be paid to the care and handling of the material.

Shipping

Product ships frozen on dry ice.

Literature

1. Paradiso, P. (2016) World Vaccine Congress. Washington, D.C.
2. Brookes, C., *et al.* (2013) Development of a large scale human complement source for use in bacterial immunoassays. *Journal of Immunological Methods*, 391:39-49.
3. Zollinger, W. D., & Mandrell, R. E. (1983) Importance of complement source in bactericidal activity of human antibody and murine monoclonal antibody to meningococcal group B polysaccharide. *Infection and Immunity*, 40:257-264.
4. Santos, G. F., *et al.* (2001) Importance of complement source in measuring meningococcal bactericidal titers. *Clinical and Diagnostic Laboratory Immunology*, 8:616-623.
5. McIntosh, E. D. G., *et al.* (2015) Serum bactericidal antibody assays – the role of complement in infection and immunity. *Vaccine*, 33:4414-4421.

Precaution

All blood products should be treated as potentially infectious source material from which this product was derived. No known test method can offer assurance that products derived from human blood will not transmit infectious agents. All Human serum products have been thoroughly tested to strict guidelines. However, while all of the human donors that go into producing each batch of human serum have been tested and have been found negative for several virus antibodies and antigens, there is no known test method can offer complete assurance that human derived blood products are not capable of transmitting an infectious disease. It is therefore important that human serum be considered potentially infectious and handled accordingly.

Support

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