

Mannan-binding lectin standard serum (human)

Normal Human Serum

PRODUCT NO. **SER 101**

PRESENTATION
Preparation: Freeze-dried, undiluted pooled human serum
Content: Mannan-binding lectin (MBL), 1000 arbitrary units (AU) per ml
Storage: At -20°C
Stability: 2 years

PREPARATION
All individual sera and the serum pool were tested negative for HBsAg and for antibodies against HIV-1, HIV-2 and HCV. Blood from 30 healthy donors was collected in flasks without anticoagulant and allowed to clot. Serum was collected after centrifugation and pooled in a 10-liter flask. After mixing, 1-ml aliquots of the serum were pipetted into 2-ml vials. Each vial was assigned an MBL content of 1000 AU. The material was freeze-dried and the vials closed under vacuum.

BACKGROUND
Human MBL¹ is an opsonin, which activates the complement system² on binding to microbial polysaccharides. Plasma concentrations of normally oligomerized MBL range from 0 to 7000 ng/ml and may be below 50 ng/ml in up to 12% of healthy Caucasian blood donors. Low plasma concentrations may be associated with an inherited opsonin defect³.

REFERENCES
1. Kawasaki N, Kawasaki T, Yamashina I (1983) Isolation and characterization of a mannan-binding protein from human serum. *J Biochem (Tokyo)* 94:937-947.
2. Turner MW (1998) Mannose-binding lectin (MBL) in health and disease. *Immunobiology* 199:327-339.
3. Garred P, Madsen HO, Kurtzhals JA, Lamm LU, Thiel S, Hey AS, Svejgaard A (1992) Diallelic polymorphism may explain variations of the blood concentration of mannan-binding protein in Eskimos, but not in black Africans. *Eur J Immunogenet* 19:403-412.
4. Minchinton RM, Dean MM, Clark TR, Heatley S, Mullighan CG (2002) Analysis of the Relationship Between Mannose- Binding Lectin (MBL) Genotype, MBL Levels and Function in an Australian Blood Donor Population. *Scand J Immunol* 56:630-641.

CONDITIONS

All products are supplied on the understanding that they are for in vitro use only. The information and product are offered without guarantee as the ultimate conditions of use are beyond our control. The animals from which this product was derived have not been exposed to or inoculated with any livestock or poultry disease agents exotic to the United States or Western Europe, and did not originate from facilities where work with exotic disease agents affecting livestock or avian species is carried out.