Claims

1. A composition comprising underivatized, soluble β–glucan having immunostimulatory properties, which can be administered in single doses between 3 mg/kg and 6 mg/kg without inducing biochemical mediators causing inflammatory side effects and wherein the soluble β-glucan has a molecular weight over 380,000 Da in an amount less than or equal to 10%, a molecular weight under 25,000 Da in an amount less than or equal to 17% and wherein the underivatized, soluble β–glucan is not treated with caustic solution during preparation.

2. The composition of claim 1 wherein the underivatized, soluble β–glucan has a polydispersity less than or equal to 2.5.

3. The composition of claim 1 wherein the underivatized, soluble β–glucan is derived from *Saccharomyces cerevisiae*.

4. A composition comprising underivatized, soluble β–glucan having an average molecular weight between 120,000 Da and 205,000 Da that is not treated with caustic solution during preparation, the composition capable of being administered to a human or animal at a dose of 6 mg/kg without inducing biochemical mediators causing inflammatory side effects.

5. The composition of claim 4 wherein the underivatized, soluble β–glucan contains no more than 1.6% reducing sugar of total hexose.

6. The composition of claim 4 wherein the underivatized, soluble β–glucan contains less than 25 μg ergosterol/mg hexose.

7. The composition of claim 4 wherein the undervatized, soluble β–glucan further comprises polymeric chains associated into triple helices.