

The invention relates to the polyvalent immunogenic composition containing conjugate of the carrier protein and the capsule polysaccharide or oligosaccharide isolated from *H. influenzae* type B. TT, DT or CRM197 are used as the carrier protein. In addition, the composition contains two or more bacterial polysaccharides capable of protecting the host against the infections with the bacteria containing these polysaccharides. The conjugate and all additional polysaccharides or oligosaccharides are not absorbed on the adjuvant aluminum salt. The removal of aluminum salt enhances the immunogenicity of the composition. The invention also discloses the method for preparing the immunogenic composition, the method of immunization against the infections caused by *Haemophilus influenzae* type B, and the use of the polyvalent immunogenic composition for the treatment and the prevention of the diseases caused by *Haemophilus influenzae* type B.