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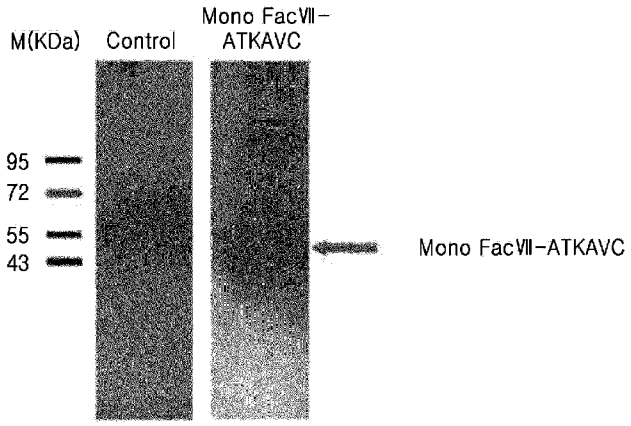
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(54) Title: BLOOD COAGULATION FACTOR VII AND VIIA DERIVATIVES, CONJUGATES AND COMPLEXES COMPRISING THE SAME, AND USE THEREOF



(57) Abstract: The present invention relates to a blood coagulation factor VII derivative, a blood coagulation factor VIIa derivative, FacVII and FacVIIa conjugates each prepared by linking a polymer capable of extending the blood half-life to the derivative, FacVII and VIIa complexes each prepared by linking a carrier to the conjugate, genes encoding the FacVII and FacVIIa derivatives, expression vectors comprising the genes, transformants introduced with the expression vectors, a method for preparing the FacVII and FacVIIa derivatives using the transformants, a method for preparing the FacVIIa conjugate and complex, a FacVIIa complex prepared by the method, a pharmaceutical composition for the prevention or treatment of hemophilia comprising the derivative, conjugate, or complex as an active ingredient, and a pharmaceutical composition for blood coagulation comprising the derivative, conjugate, or complex as an active ingredient. Further, the present invention relates to a method for preventing or treating hemophilia or for promoting blood coagulation, comprising administering to a subject a therapeutically effective amount of the composition. The FacVII or FacVIIa derivative of the present invention is able to bind with a carrier capable of improving the blood half-life while maintaining the activity of FacVII or FacVIIa, and they can be widely used in the development of effective prophylactic or therapeutic agent for hemophilia.

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