Abstract

CHIMERIC FACTOR VIII POLYPEPTIDES AND USES THEREOF

The present invention provides a VWF fragment comprising the D' domain and D3 domain of VWF, a chimeric protein comprising the VWF fragment and a heterologous moiety, or a chimeric protein comprising the VWF fragment and a FVIII protein and methods of using the same. A polypeptide chain comprising a VWF fragment of the invention binds to or is associated with a polypeptide chain comprising a FVIII protein and the polypeptide chain comprising the VWF fragment can prevent or inhibit binding of endogenous VWF to the FVIII protein. By preventing or inhibiting binding of endogenous VWF to the FVIII, which is a half-life limiting factor for FVIII, the VWF fragment can induce extension of half-life of the FVIII protein. The invention also includes nucleotides, vectors, host cells, methods of using the VWF fragment, or the chimeric proteins.

Figure 1