

The present invention provides a chimeric protein comprising a first polypeptide which comprises a FVIII protein and a first Ig constant region or a portion thereof and a second polypeptide which comprises a VWF protein comprising the D' domain and D3 domain of VWF, a XTEN sequence having less than 288 amino acids in length, and a second Ig constant region or a portion thereof, wherein the first polypeptide and the second polypeptide are associated with each other. The invention also includes nucleotides, vectors, host cells, methods of using the chimeric proteins.