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Short Communication

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[Biologically Active Compounds of Plants in Uzbekistan Flora and their Potential Applications in Agriculture](#)

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Research Article

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[Efficient Sequential Chromatographic Purification of a Recombinant Nanobody-Fc Fusion Designed for Treatment of Severe Fever with Thrombocytopenia Syndrome](#)

Severe fever with thrombocytopenia syndrome (SFTS) is caused by a virus that induces acute infections. Despite its expansion beyond China, where it first appeared in 2009, no specific drug exists to treat the disease. The discovery that antibodies targeting the SFTS virus surface glycoprotein (Glycoprotein N, GN) significantly enhance patient survival has driven the development of antibodies, particularly nanobodies. Nanobodies targeting the GN protein are a promising therapeutic approach. This paper presents a systematic study of the purification process for a recombinant nanobody-Fc fusion designed to treat the SFTS virus HB29. The study evaluated a sequential purification approach using affinity (AFF), ion exchange (IEC), and hydrophobic interaction chromatography (HIC) techniques to gradually remove impurities. The results demonstrate that this approach achieves an overall yield of more than 50% and a total purity of 95%. Efficient nanobody purification methods, as outlined here, can pave the way for novel treatments to manage this disease.

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