Supplementary Materials: Tetanus Neurotoxin Neutralizing Antibodies Screened from a Human Immune scFv Antibody Phage Display Library

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1. Families of the Heavy Chain and Light Chain the CDR-Sequences of the scFvs Isolated from the Phage-Displayed Library

Table S1. Families of the heavy Chain and the CDR-Sequences of the scFvs isolated from the Phage-Displayed Library.

Heavy Chain Family	Clone	VH		
		CDR1	CDR2	CDR3
VH2	2-1B	TSGVGVG	LIYWNDDKRYSPSLKS	ARDTSGKYSDYRTATYGYSMDY
VH3	2-2D	DYGMS	GINWNGGSTGYADSVKG	ENHDSSGYFSRLSFDV
VH3	2-7E	DYGMS	GINWNGGSTGYADSVKG	ENHDSSGYFSRLSFDV
VH3	2-7G	SNYMS	LISWDGGSTYYADSVKG	RRGANYYYGMDV
VH3	3-6C	SYGMH	VISYDGSNKYYADSVKG	ATFCDYTDYLGRCEALES
VH5	5-1A	SYWIS	RIDPSDSYTNYSPSFQG	VKRGGDNGWGAFDV
VH1	5-5E	SSAVQ	WIVVGSGNTNYAQKFQE	ARVPETTVTTGPLLYYYYGMDV
VH2	S-1-1H	SSYGMH	RIDWDDDKFYSTSLKT	AEAGAAAWATGANALDA
VH2	S-3-2D	SSYGMH	RIDWDDDKFYSTSLKT	AEAGAAAWATGANALDA
VH6	S-1-7C	SNSAAWN	RTYYRSKWYNDYAVSVKS	LGGGRYSYGYIPYYYYMDV
VH5	S-4-6C	SSYGMH	RIDWDDDKFYSTSLKT	AEAGAAAWATGANALDA
VH6	S-4-7H	SNSAAWN	RTYYRSKWYNDYAVSVKS	LGGGRYSYGYIPYYYYMDV

Table S2. Families of the light Chain and the CDR-Sequences of the scFvs isolated from the Phage-Displayed Library.

Light Chain Family	Clone	VL		
		CDR1	CDR2	CDR3
VKI	2-1B	RASQSISSWLA	DASSLES	QQYNSYS
VK3	2-2D	RASQSVSSSYLA	GASSRAT	QQRTSWPPA
VK3	2-7E	RASQSVSSSYLA	GASSRAT	QQRTSWPPA
VK3	2-7G	RASQSVSSNLA	GASTRAT	HQYGSLPRT
VKI	3-6C	WASQGISSYLA	YASSLQS	QQYYSTP
VKI	5-1A	RASQGISSWLA	AASSLQS	QQANSFP
VK3	5-5E	RASQSVSSYLA	DASNRAT	QQRSNWP
VK3	S-1-1H	RASQSVSSSYLA	GASSRAT	QQYGSSP
VK3	S-3-2D	RASQSVSSSYLA	GASSRAT	QQYGSSP
Vλ1	S-1-7C	SGSSSNIGNNAVN	YDDLLPS	ATWGDALNGPV
VKI	S-4-6C	RASQSVSSSYLA	GASSRAT	QQYGSSP
Vλ1	S-4-7H	SGSSSNIGNNAVN	YDDLLPS	ATWGDALNGPV

2. SDS-PAGE of the scFv Expressed and Isolated from *E. coli*

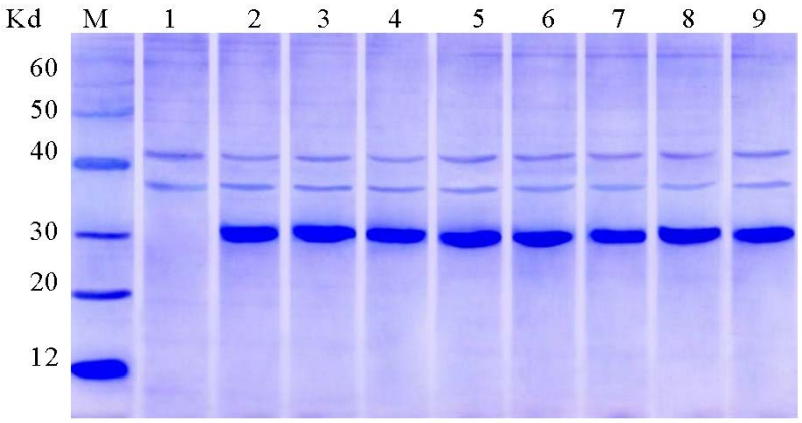

Figure S1. SDS-PAGE analysis of recombinant Kil-SN-scFv in *E. coli* BL21. M: Marker; Lane 1: supernatant of Kil-SN induced with IPTG; Lane 2–9: supernatant of Kil-SN-scFv induced with IPTG, from left to right: 2-1B, 2-2D, 2-7G, 3-6C, 5-1A, 5-5E, S-1-1H, S-4-7H.

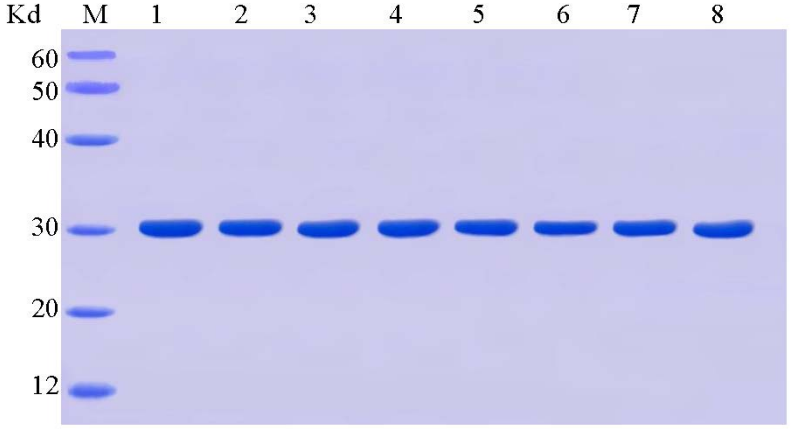

Figure S2. SDS-PAGE analyses of the His-scFv protein purified using Ni-NTA agarose column. M: Marker; Lane 1–8: purified His-scFv, from left to right: 2-1B, 2-2D, 2-7G, 3-6C, 5-1A, 5-5E, S-1-1H, S-4-7H.

3. ELISA Characterization of Purified scFvs Binding to Different Proteins

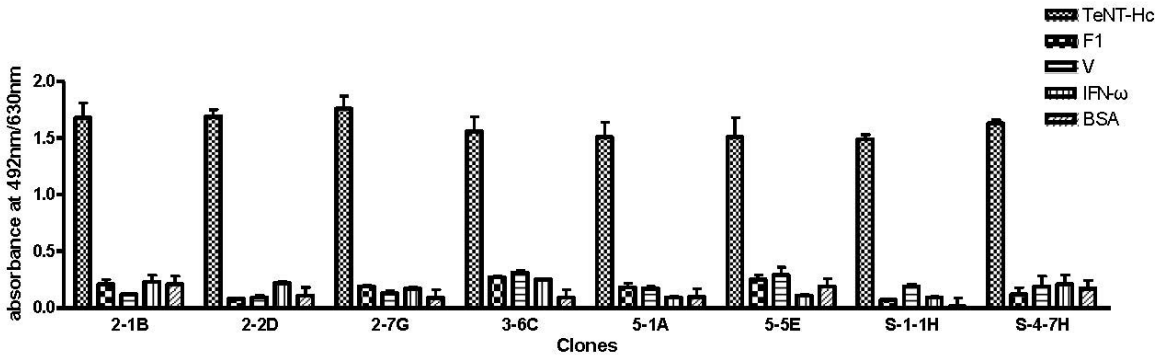

Figure S3. ELISA characterization of purified scFvs binding to different proteins. Assays were performed by immobilizing TeNT-Hc, F1, V, IFN-ω, and BSA-coated on a polystyrene plate. Purified scFvs that were reactive with the coated antigen, were detected with a 1:5000 dilution of horseradish peroxidase (HRP)–conjugated anti-His antibody. The results of the assay are shown as the absorbance at 492 nm/630 nm. Assays were performed in triplicate, and the range is shown.