Novel cryptic ADAMTS13 epitopes uncover a distinct open ADAMTS13 conformation in immune-mediated TTP

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Title

Novel cryptic ADAMTS13 epitopes uncover one distinct open ADAMTS13 in iTTP

Authors

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Supplementary data

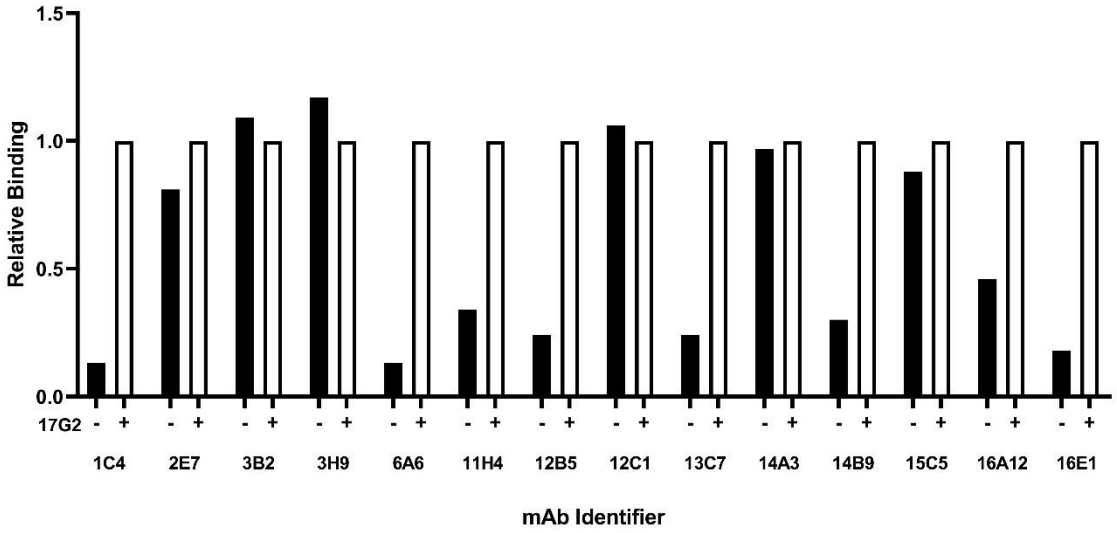

Figure S1. Antibody screen of anti-M domain monoclonal antibodies. A total of 13 anti-M mAbs were screened for their potential to recognize cryptic epitopes in ADAMTS13. Epitopes were considered cryptic when mAbs could not capture closed plasma ADAMTS13 (black bars) but could capture plasma ADAMTS13 upon opening using mAb 17G2 (white bars). As a positive control, mAb 1C4 was used as this mAb is known to recognize a cryptic ADAMTS13 epitope.[1]

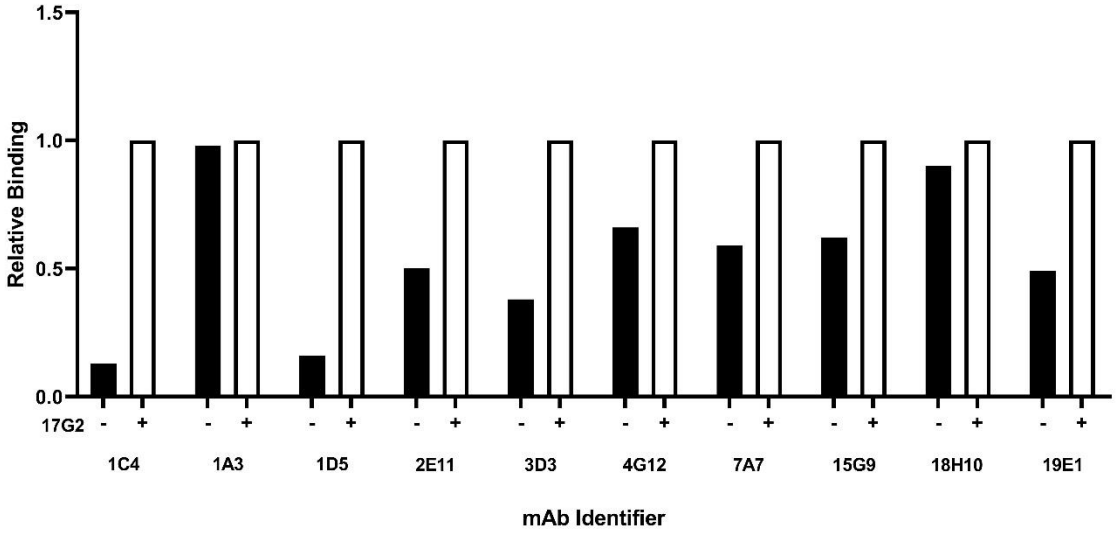

Figure S2. Antibody screen of anti-DT domain monoclonal antibodies. A total of 9 anti-DT mAbs were screened for their potential to recognize cryptic epitopes in ADAMTS13. Epitopes were considered cryptic when mAbs could not capture closed plasma ADAMTS13 (black bars) but could capture plasma ADAMTS13 upon opening using mAb 17G2 (white bars). As a positive control, mAb 1C4 was used as this mAb is known to recognize a cryptic ADAMTS13 epitope.[1]

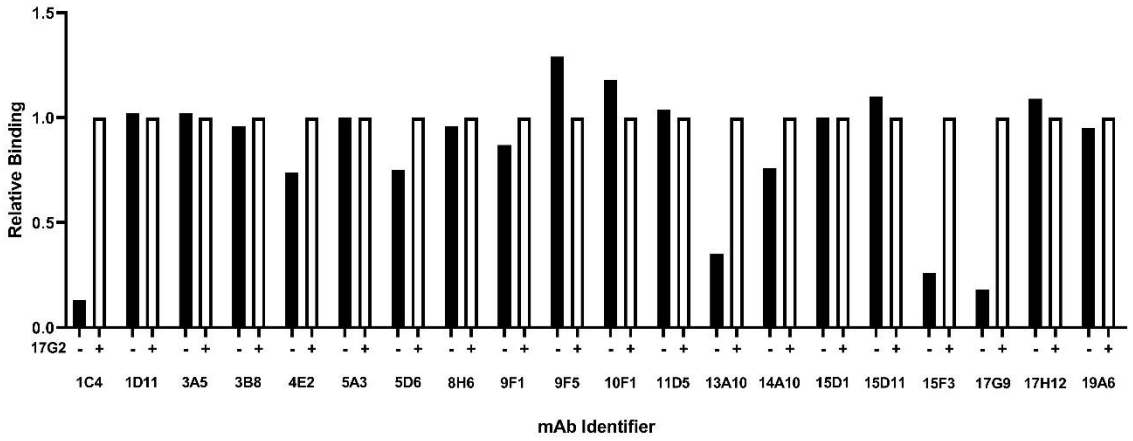

Figure S3. Antibody screen of anti-CS domain monoclonal antibodies. A total of 19 anti-CS mAbs were screened for their potential to recognize cryptic epitopes in ADAMTS13. Epitopes were considered cryptic when mAbs could not capture closed plasma ADAMTS13 (black bars) but could capture plasma ADAMTS13 upon opening using mAb 17G2 (white bars). As a positive control, mAb 1C4 was used as this mAb is known to recognize a cryptic ADAMTS13 epitope.[1]

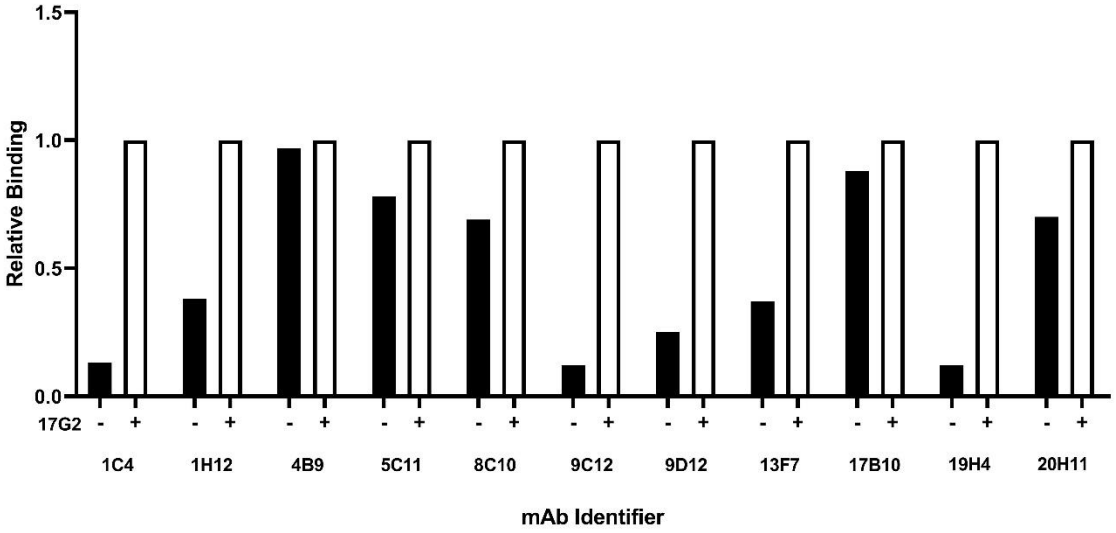

Figure S4. Antibody screen of anti-T2T8 domain monoclonal antibodies. A total of 10 anti-T2T8 mAbs were screened for their potential to recognize cryptic epitopes in ADAMTS13. Epitopes were considered cryptic when mAbs could not capture closed plasma ADAMTS13 (black bars) but could capture plasma ADAMTS13 upon opening using mAb 17G2 (white bars). As a positive control, mAb 1C4 was used as this mAb is known to recognize a cryptic ADAMTS13 epitope.[1]

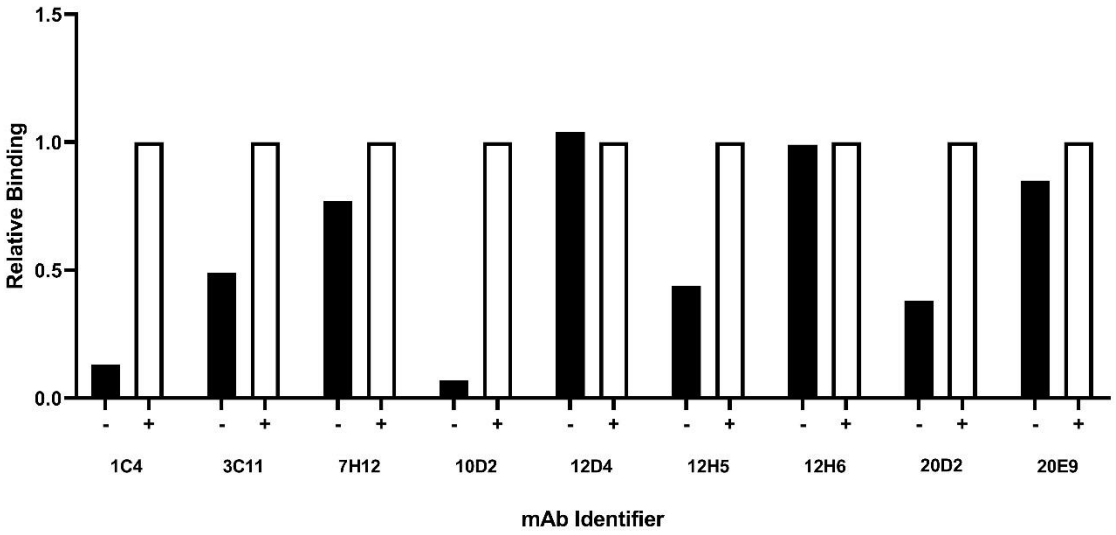

Figure S5. Antibody screen of anti-CUB domain monoclonal antibodies. A total of 8 anti-CUB mAbs were screened for their potential to recognize cryptic epitopes in ADAMTS13. Epitopes were considered cryptic when mAbs could not capture closed plasma ADAMTS13 (black bars) but could capture plasma ADAMTS13 upon opening using mAb 17G2 (white bars). As a positive control, mAb 1C4 was used as this mAb is known to recognize a cryptic ADAMTS13 epitope.[1]

References

1. Roose, E., Schelpe, A. S., Joly, B. S., Peetermans, M., Verhamme, P., Voorberg, J., Greinacher, A., Deckmyn, H., De Meyer, S. F., Coppo, P., Veyradier, A., & Vanhoorelbeke, K. (2018). An open conformation of ADAMTS-13 is a hallmark of acute acquired thrombotic thrombocytopenic purpura. Journal of thrombosis and haemostasis : JTH, 16(2), 378–388.