Anti-ADAMTS13 IgG autoantibodies present in healthy individuals share linear epitopes with those in patients with thrombotic thrombocytopenic purpura

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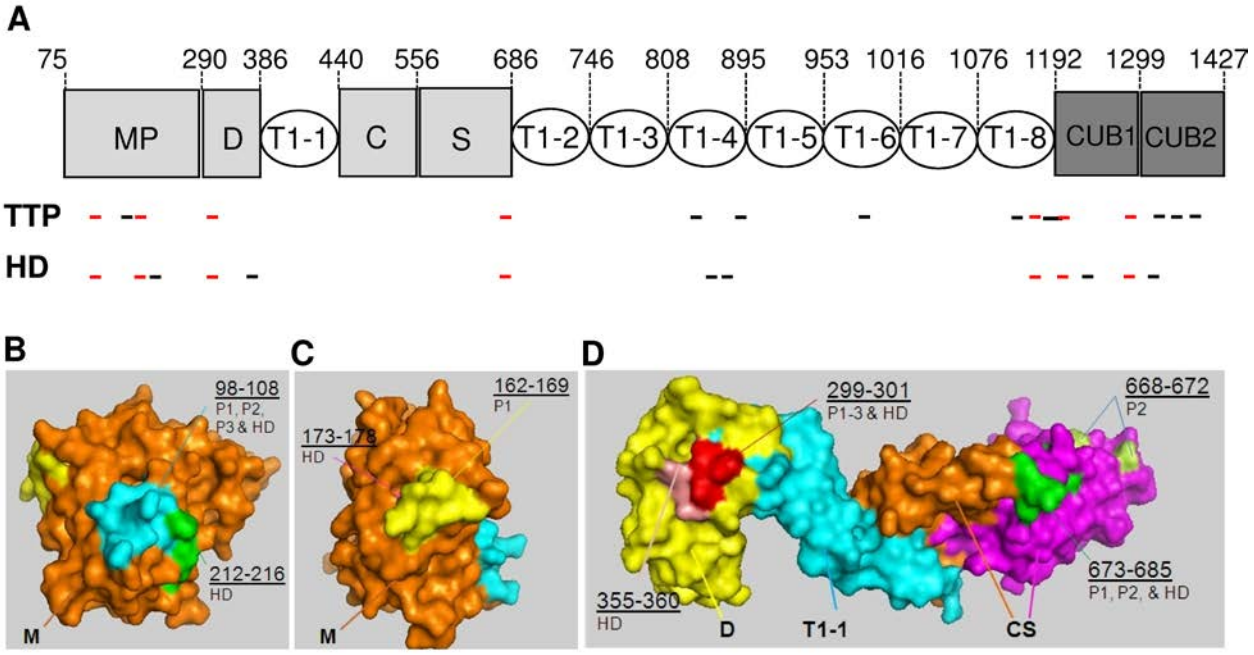

Supplementary Figure 1: Epitope mapping of affinity-purified anti-ADAMTS13 IgG antibodies using peptide arrays. (A) Schematic representation of the total linear ADAMTS13 epitopes (dashes) that have interacted with the isolated antibodies from any one of the TTP patients (TTP) and a HD pool (HD). Dashes in red denote shared linear epitopes between TTP patients and HD. The cartoon on top shows the structural domains of ADAMTS13 with the positions of their delimiting amino acid residues. **B-D)** Antibody binding epitopes of patient 1 (P1), patient 2 (P2), patient 3 (P3) and healthy donors (HD) painted on the surface of the modeled ADAMTS13 metalloprotease domain (B and C) and the crystal structure of the ADAMTS13-DTCS fragment (D). Peptides 98-108 and 162-169 are painted blue (B) and yellow (C) respectively, on the surface of the metalloprotease domain (orange). Yellow, blue, orange, and magenta segments in D represent disintegrin domain, the first TSP1 repeat, Cys-rich domain, and spacer domains, respectively. Peptides 299-301 and 355-360 are painted red and light pink, respectively on the surface of the disintegrin domain; peptides 673-685 and 668-672 are shown on the surface of the spacer domain. The peptide 173-178 located in the metalloprotease domain is essentially buried (C).