



V 36 Human complement-related protein 5 (CFHR5) and plasminogen are recruited by *Borrelia burgdorferi* surface protein CRASP-5 for immune evasion

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Borrelia burgdorferi s.s. are transmitted by *Ixodes* ticks to the human host and are the causative agents of Lyme disease. These spirochaetes have learned to evade the host immune defenses, in particular the complement system. Once activated, this versatile part of the innate immune response leads to phagocytosis and cell lysis of invading microorganisms. *B. burgdorferi* expresses 5 proteins termed complement regulator-acquiring surface proteins (BbCRASP1–5) that bind host complement inhibitors of the factor H protein family as well as plasminogen. Here, we show that both recombinant and plasma-derived CFHR5 and plasminogen are recruited by the outer surface protein of *B. burgdorferi* BbCRASP5. Both ligands mediate complement inhibition by degradation and inactivation of the central complement component C3b.