Biochemical Characterization of CPS-1, a Subclass B3 Metallo-beta-Lactamase from a Chryseobacterium piscium Soil Isolate - DTU Orbit (17/10/2019)

CPS-1 is a subclass B3 metallo-beta-lactamase from a Chryseobacterium piscium isolate collected from soil, showing 68% amino acid identity to the GOB-1 enzyme. CPS-1 was overproduced in Escherichia coli Rosetta (DE3), purified by chromatography, and biochemically characterized. This enzyme exhibits a broad-spectrum substrate profile, including penicillins, cephalosporins, and carbapenems, which overall resembles those of L1, GOB-1, and acquired subclass B3 enzymes AIM-1 and SMB-1.

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