

R-4. Isolation and Partial Characterization of a 50 kDa Hemin-regulated Cell Envelope Protein from *Prevotella nigrescens*

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In the study presented here, identification, purification, and partial characterization of a hemin-regulated protein in *Prevotella nigrescens* were carried out. The results of this study confirm that the availability of hemin influences the expression of a selected membrane protein as well as the growth rate of *P. nigrescens* ATCC 33563. The 50 kDa cell envelope associated protein, whose expression is hemin regulated, is considered to be a putative hemin-binding protein from *P. nigrescens*. Disulfide bonds were not present in this protein, and N'-terminal amino acid sequence analysis revealed that this protein belongs to a new, so far undescribed protein. The 50 kDa protein was found to be rich in hydrophilic amino acids, with glycine comprising approximately 60% of the total amino acids. The study described here is the first to identify, purify, and biochemically characterize a putative hemin-binding protein from *P. nigrescens*. Work is in progress to further characterize the molecular structure of this protein.