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P. syringae pv. phaseolicola, the causal agent of the disease “Halo blight” on bean, produces a toxin known as phaseolotoxin, whose synthesis involves 23 genes grouped within the genome in a region known as “Pht region”. This region are organized into five transcriptional units; two monocistronic (argK and phtL) and three polycistronic (phtD, phtL and phtM), whose expression is regulated by temperature. So far, the regulatory mechanisms involved in the synthesis of phaseolotoxin have not been elucidated and the only established fact is the effect of low temperatures for its synthesis. So the goal of this study was the identification of transcription factors involved in the regulation of phaseolotoxin synthesis genes, focusing on the regulation of the phtM operon. Through gel-shift assays it was determined that the promoter region of the phtM operon contains a binding site for a regulatory protein whose presence is independent of temperature and is also present in other pathovars of P. syringae. The south-western assays estimated that the molecular weight of the regulatory protein is in a range of 14-20 kDa and has a minimum requirement of 57 bp for its binding. So far, the nature of this protein has not been identified, but the results of this study suggest that the Pht region have adapted to global regulatory mechanisms of the bacterium.