The Ferric uptake regulator (Fur) and iron availability control the production and maturation of the antibacterial peptide microcin E492

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 Microcin E492 is a pore-forming bacteriocin with toxic activity against Enterobacteriaceae, which undergoes amyloid aggregation as a mechanism to regulate its toxicity. To be active, it requires the posttranslational attachment to the C-terminus of a glycosylated enterochelin derivative (salmochelin), a process carried out by the proteins MceC, MceI and MceJ encoded in the MccE492 gene cluster. Both microcin E492 and salmochelin have a proposed role in the virulence of the bacterial pathogen Klebsiella pneumoniae. Besides, enterochelin is produced as a response to low iron availability and its synthesis is controlled by the global iron regulator Fur. Since the production of active microcin E492 depends on enterochelin biosynthesis