## Strategies for the production of fatty-acids esters in the Knallgas bacterium *Cupriavidus necator*



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## **W**Screening and quantification method

HAAs producer strains can be identified on blood agar plates due to the ability of the surfactant to lyse red blood cells. Quantification of HAAs can be done using an HPLC coupled with a CAD detector<sup>3</sup>.



**W**Genetic engineering strategies for the expression of *rhIA* gene from *P. aeruginosa* 



Plasmid-based expression strategy exploiting inducible plasmids two from pCAT<sup>4</sup> plasmid derived the architecture.

Genomic integration of the *rhlA* gene in the PHB locus via pLO3 suicide vector<sup>5</sup> in order to simultaneously obtain a  $\Delta PHB C$ . *necator* strain and insertion of the gene of interest.

Genomic integration of the *rhlA* gene in the *att*Tn7 site via a Tn7 transposonbased system. The target strain is transformed through conjugation.

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