

Publication

Artificial metalloenzymes for asymmetric allylic alkylation on the basis of the biotin-avidin technology

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Author(s) Pierron, Julien; Malan, Christophe; Creus, Marc; Gradinaru, Julieta; Hafner, Ines; Ivanova, Anita; Sardo, Alessia; Ward, Thomas R.

Author(s) at UniBasel [Ward, Thomas R.](#) ;

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Palladium in the active site: The incorporation of a biotinylated palladium diphosphine within streptavidin yielded an artificial metalloenzyme for the title reaction (see scheme). Chemogenetic optimization of the catalyst by the introduction of a spacer (red star) between biotin (green triangle) and palladium and saturation mutagenesis at position S112X afforded both R- and S-selective artificial asymmetric allylic alkylases.

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