

# ASYMMETRIC SYNTHESIS OF 2-AMINO-8-OXO-9,10-EPOXYDECANOIC ACID VIA CYCLOPROPANE CLEAVAGE STRATEGY

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The epoxy ketone structural motif is considered to bear relevant bioactivity in numerous natural products [1-3]. From medicinal point of view, the cyclic peptide histone deacetylase inhibitors (HDAC, e.g. chlamydocin, see **Fig.1**) raised tremendous attention due to their antimicrobial and anticancer potency [4]. Our research group aimed to synthesize (2*S*,9*S*)-2-amino-8-oxo-9,10-epoxydecanoic acid (Aoe), which is the key fragment responsible for bioactivity of these compounds. Ring cleavage of cyclopropanol intermediates, including conversion into chiral epoxy ketone fragment [5], will be used on the key steps of our synthetic strategy.

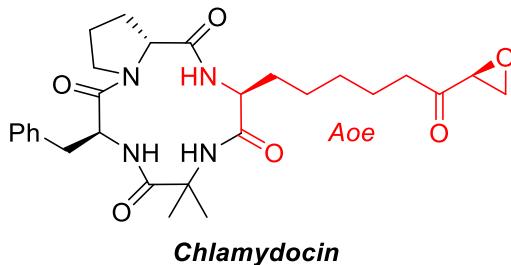


Fig.1 Naturally occurring cyclic peptide Chlamydocin.

## References

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