KS pHMM (12 protein sequences) CLF pHMM (12 protein sequences) HMMER3 pHMM scores HMMER3 pHMM scores 900 900 8 200 200 Type I PKS TypeII KS FabF TypeII CLF FabH TypeII CLF Type I PKS Aurachin FabF TypeII KS Aurachin FabH ACP pHMM (12 protein sequences) AT pHMM (7 protein sequences) 200 900 HMMER3 pHMM scores HMMER3 pHMM scores 8 400 100 200 50 8 Ecoli FAS ACP TypeI ACP TypeI AT TypeII ACP TypeII AT FabD Aurachin KSIII pHMM (10 protein sequences) KR pHMM (16 protein sequences) 900 **HMMER3 pHMM scores** HMMER3 pHMM scores 300 400 8 200 100 Typell KSIII TypeII KS TypeII CLF Typel KS Typell KR Typel KR FabG FabH chalcone TcmJ cyclase pHMM (3 protein sequences) TcmN cyclase pHMM (17 protein sequences) 300 300 HMMER3 pHMM scores HMMER3 pHMM scores 8 200 200 100 100 TcmJ cyclase OxyN cyclase Tcml cyclase TcmN cyclase TcmN cyclase OxyN cyclase Tcml cyclase TcmJ cyclase OxyN cyclase pHMM (3 protein sequences) Tcml cyclase pHMM (6 protein sequences) 9 300 **HMMER3** pHMM scores HMMER3 pHMM scores 200 400 100 200

OxyN cyclase

TcmJ cvclase

TcmN cvclase

Tcml cyclase

TcmN cvclase

Tcml cvclase

TcmJ cyclase

OxyN cyclase