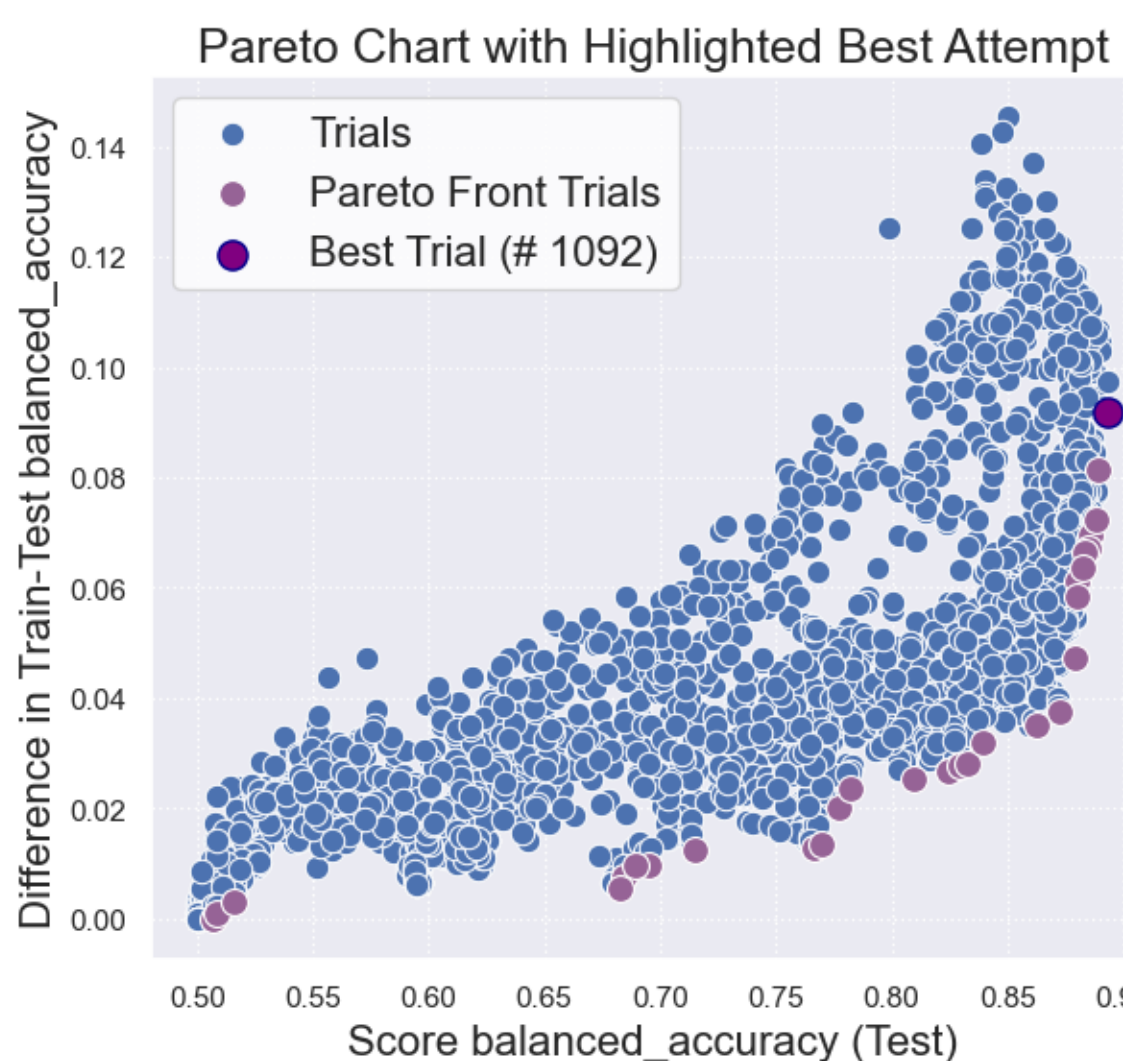
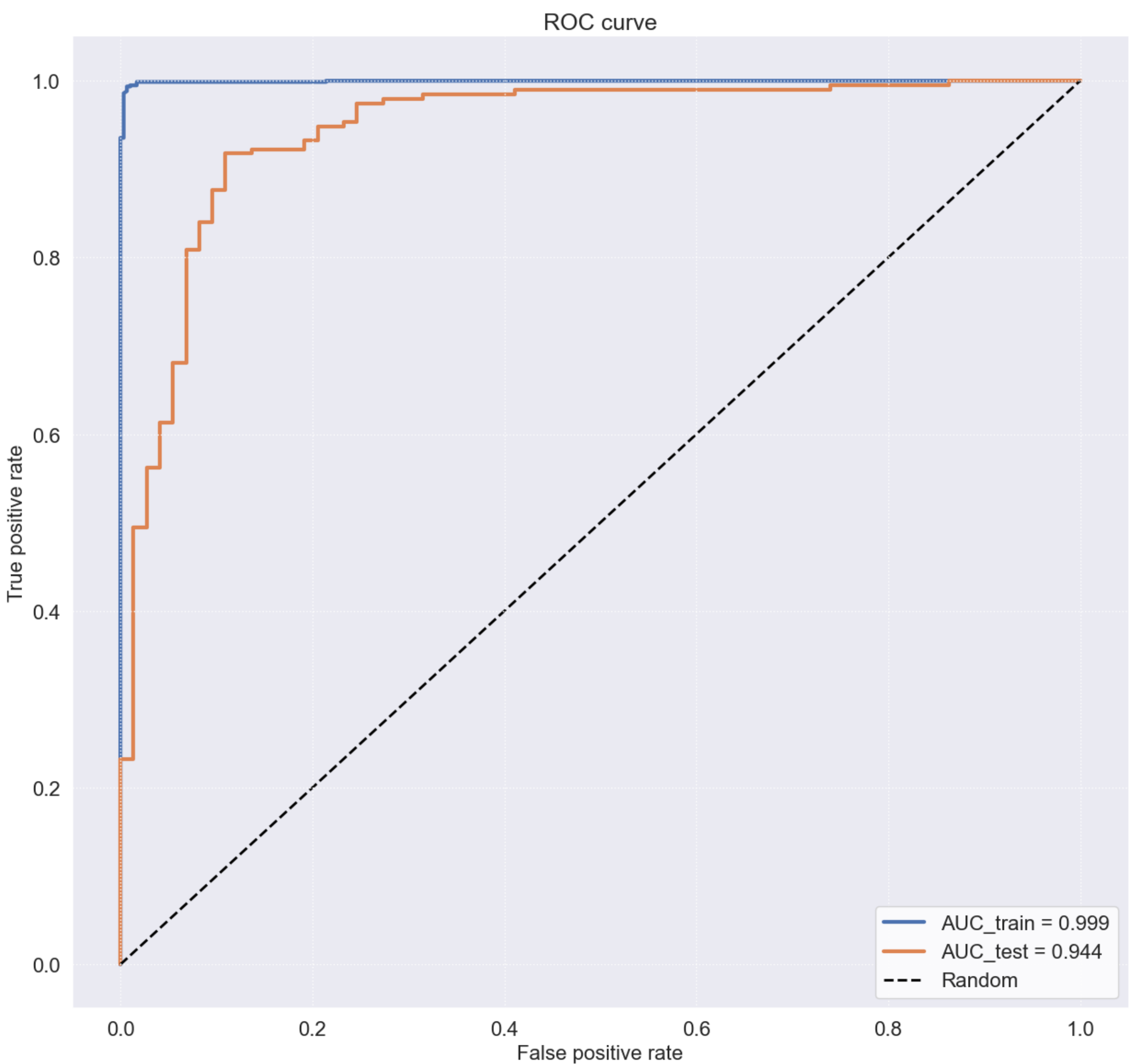
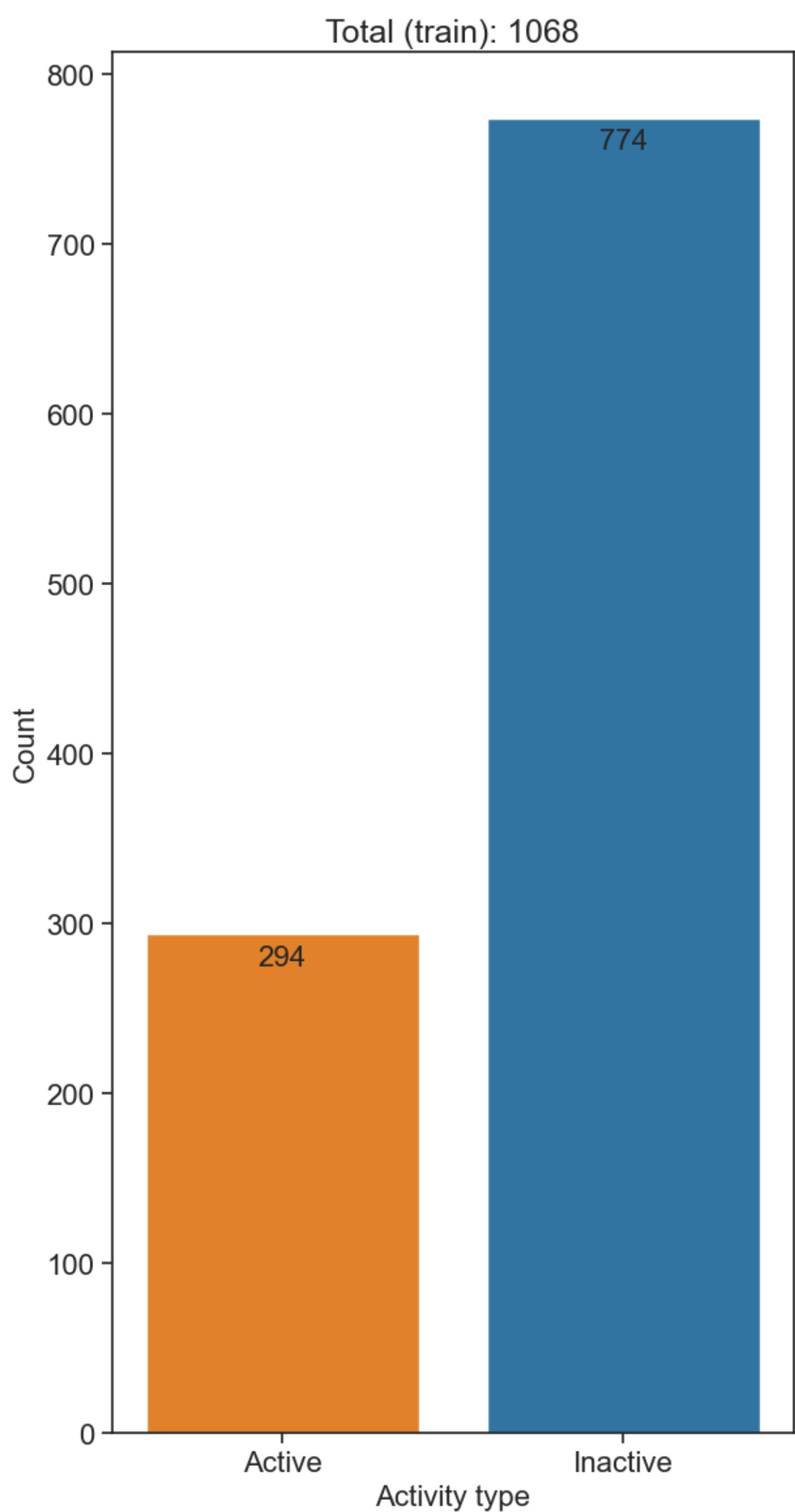
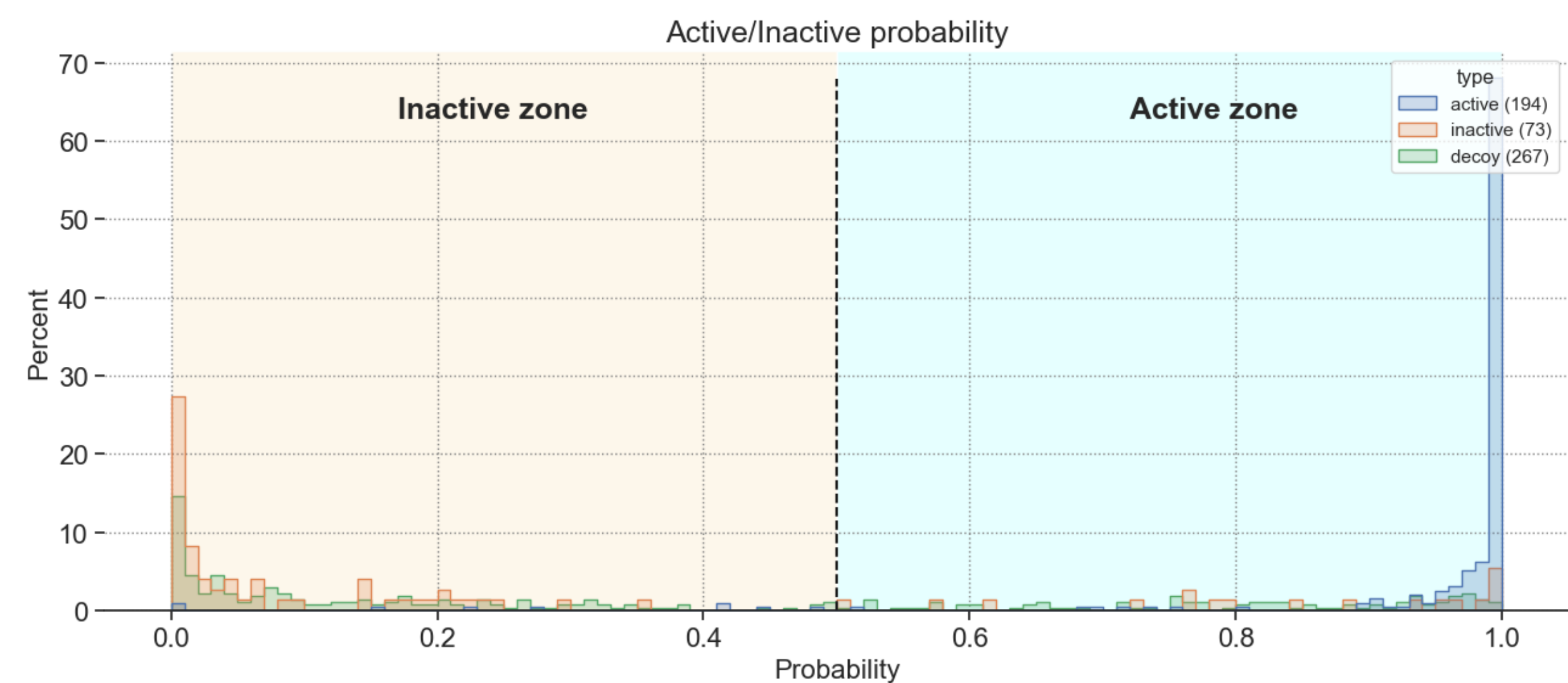
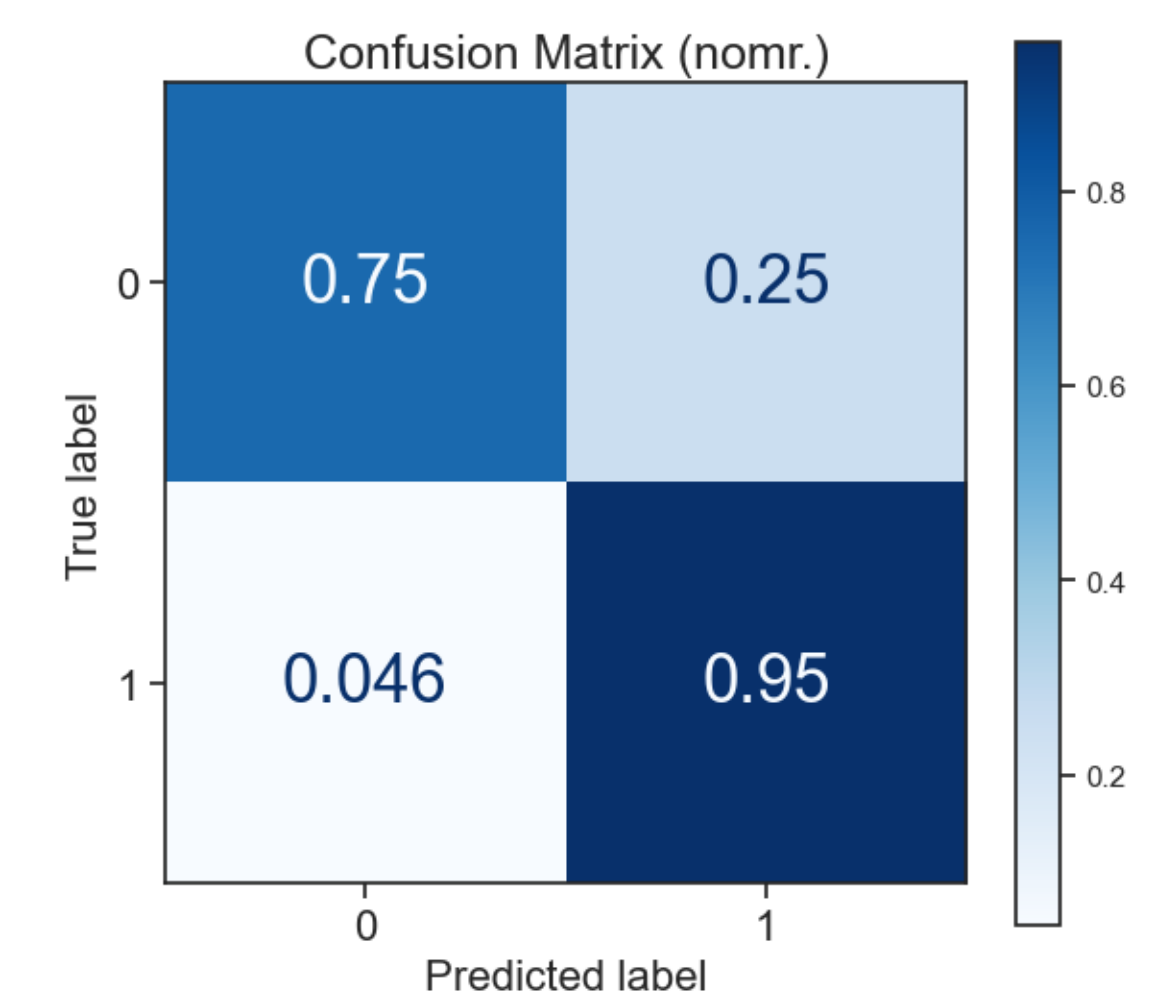
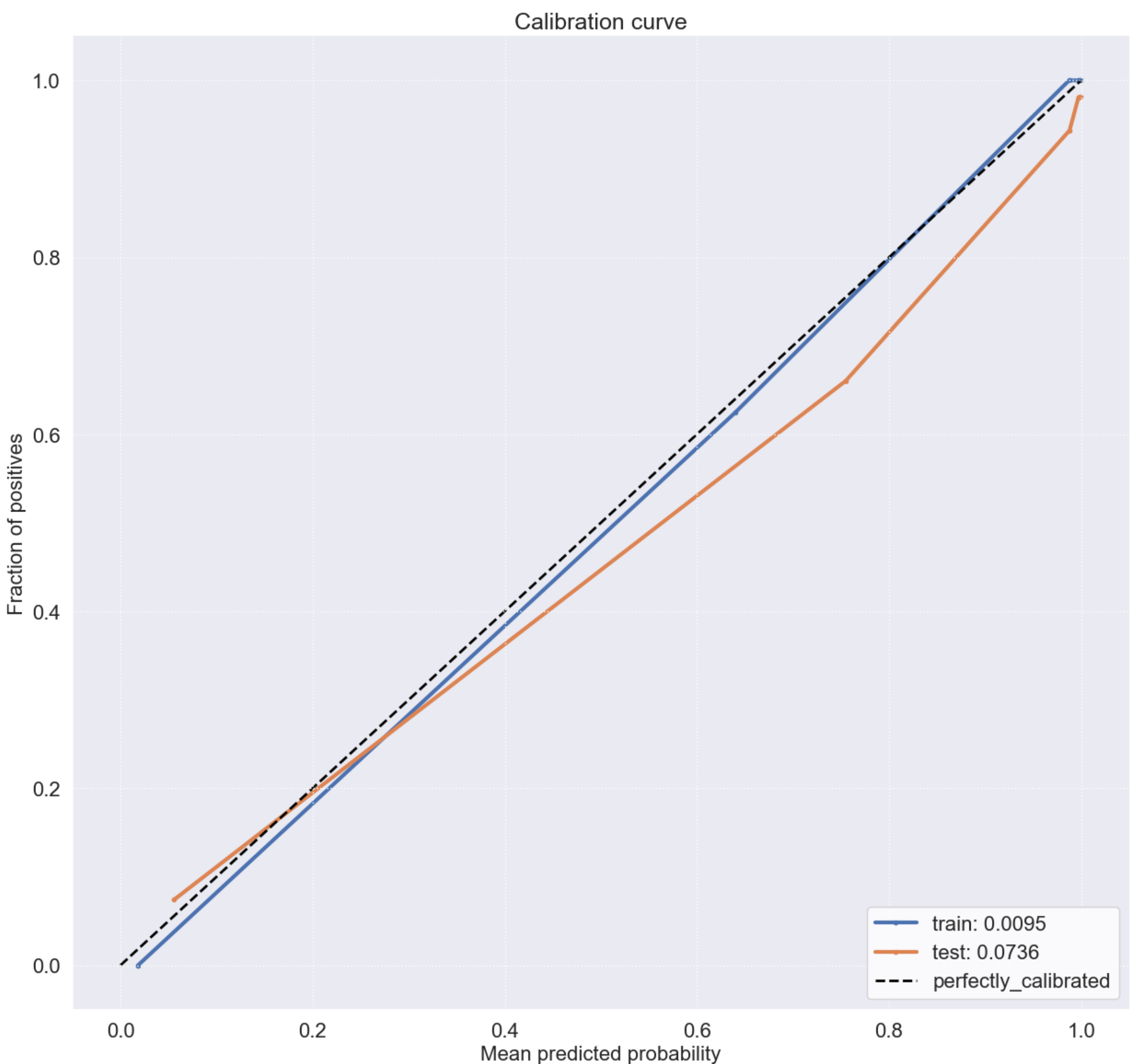
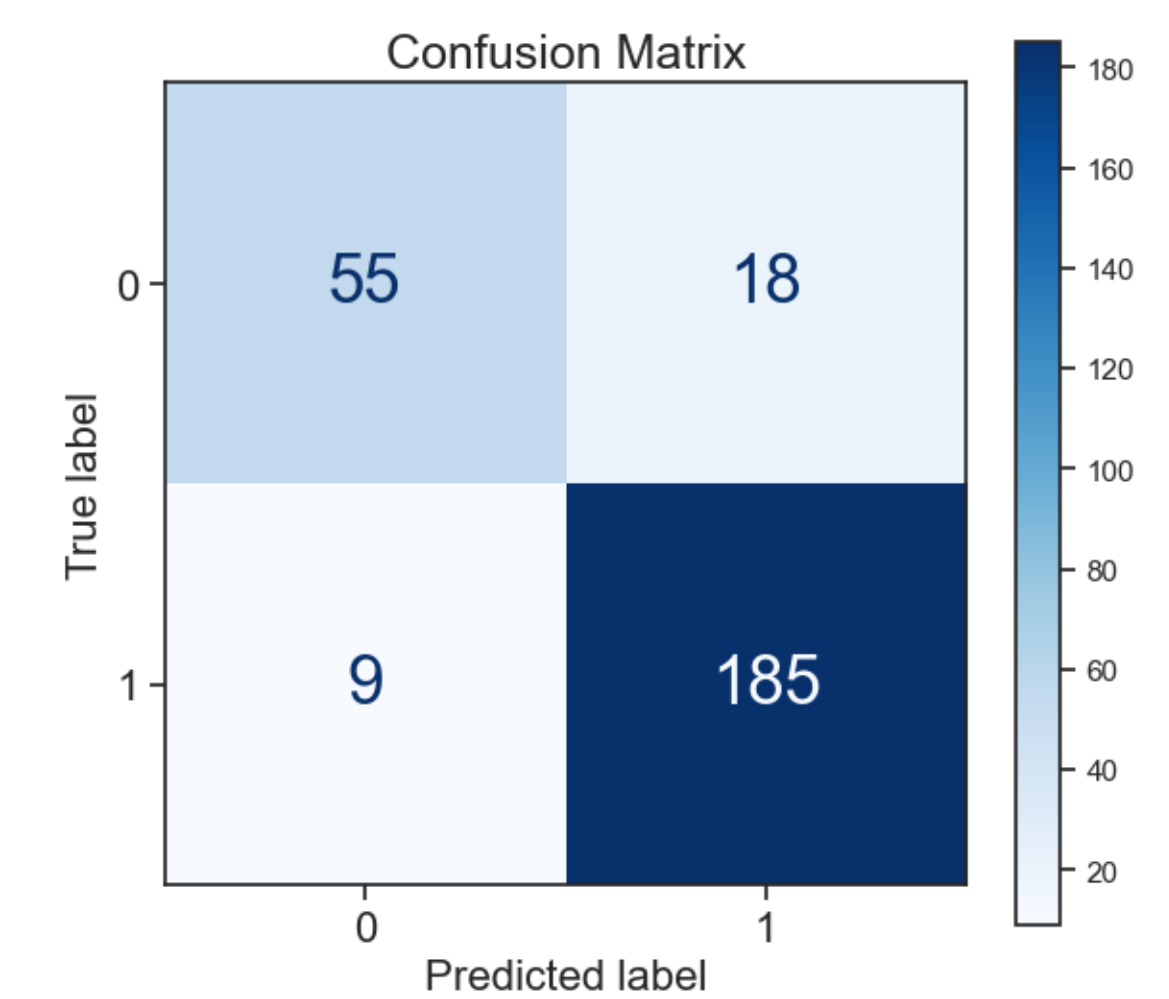


Protein: P06401 - metric: balanced\_accuracy



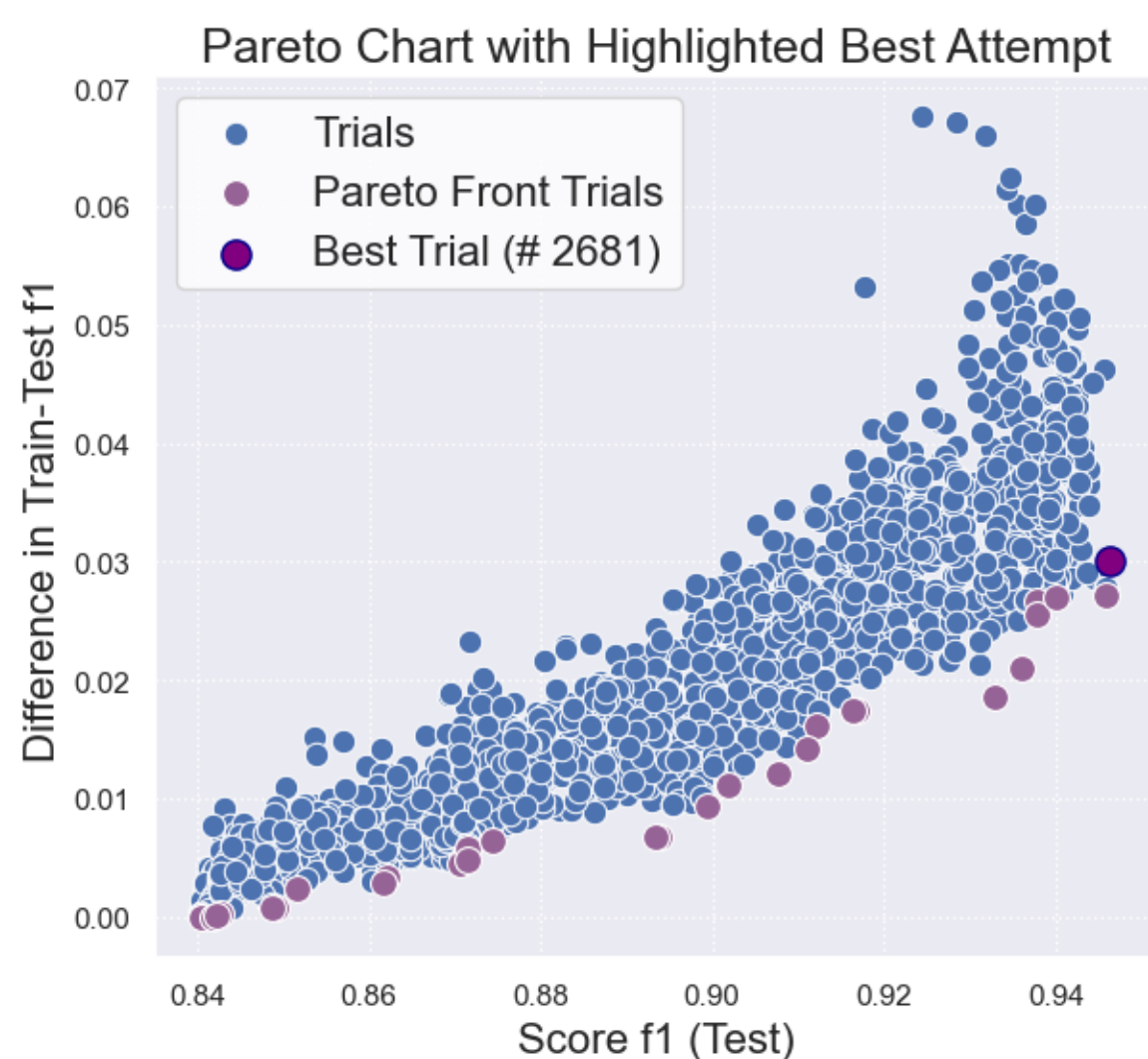
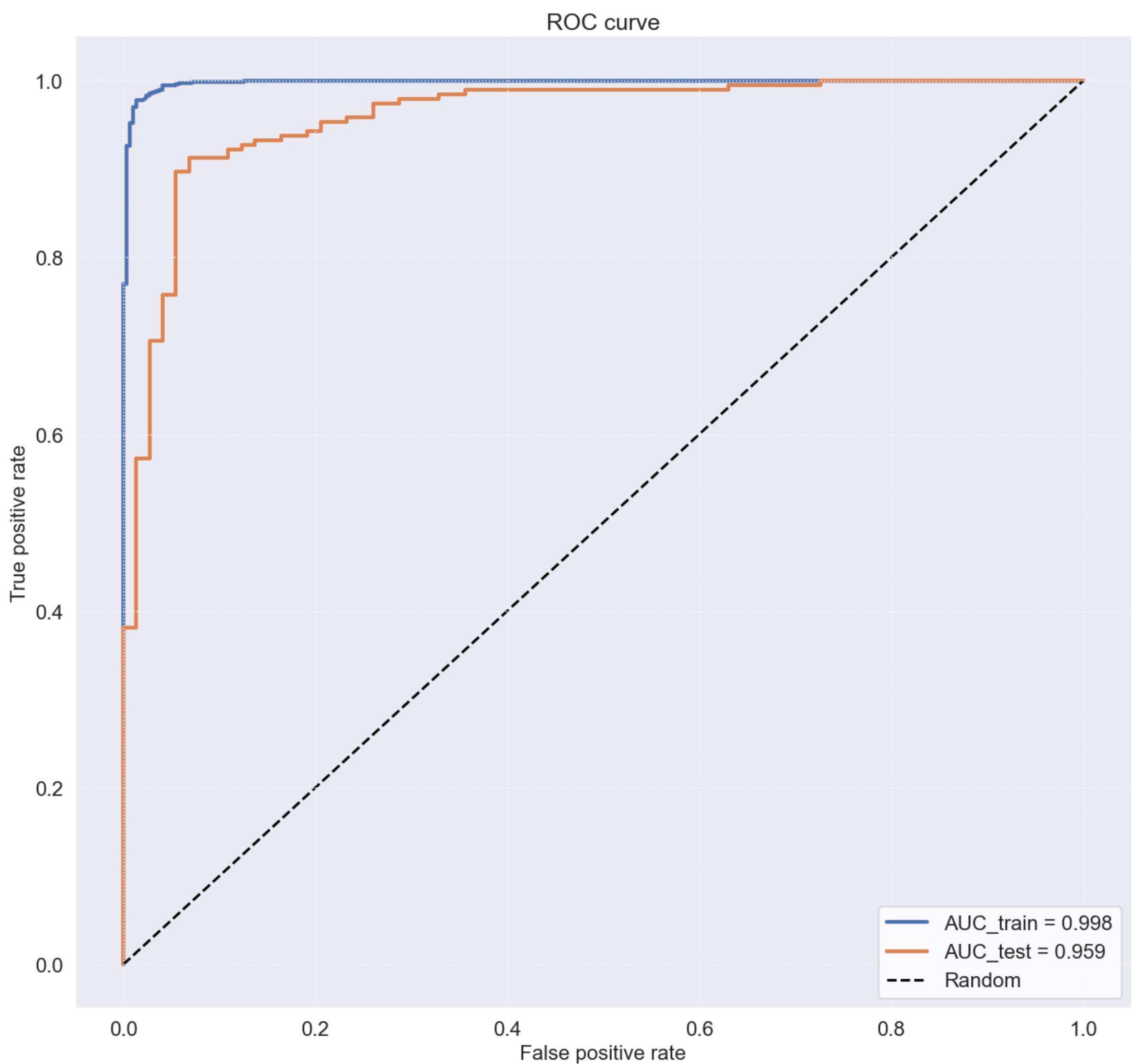
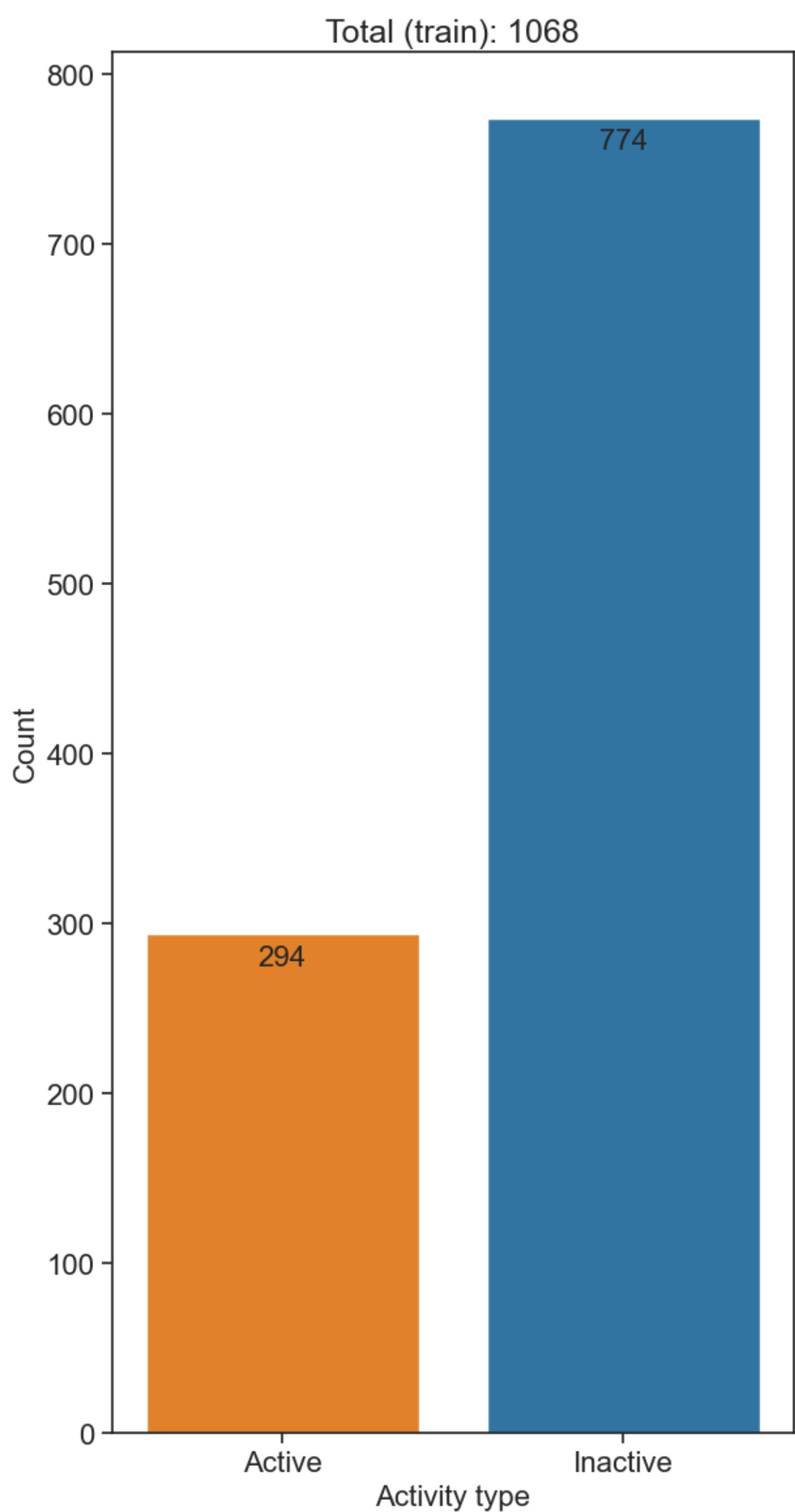
XGBoost Parameters	Value
alpha	3.5312
colsample_bytree	0.9969
gamma	0.4624
lambda	0.7795
learning_rate	0.3921
max_depth	4.0
min_child_weight	2.0
n_estimators	522.0
reg_alpha	0.4258
reg_lambda	0.5107
scale_pos_weight	1.2457
subsample	0.7686



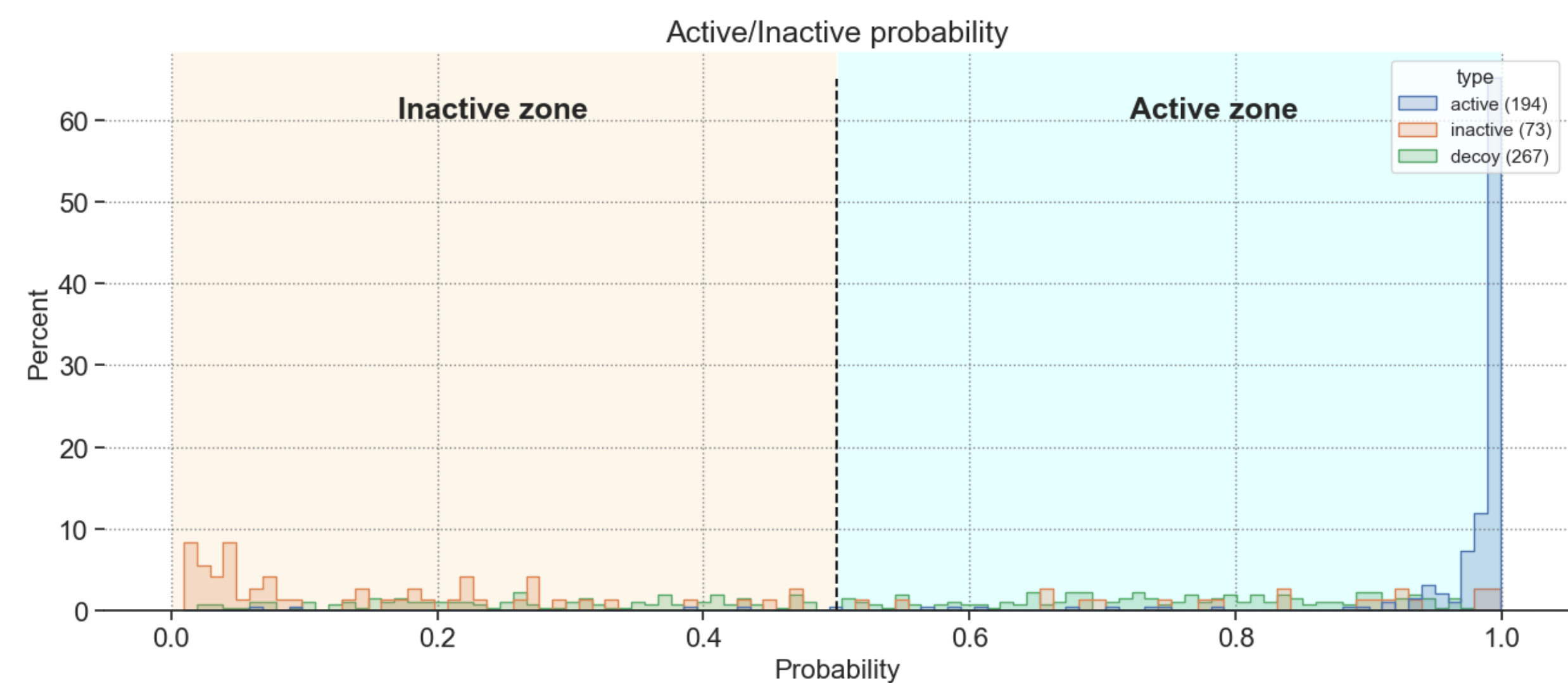
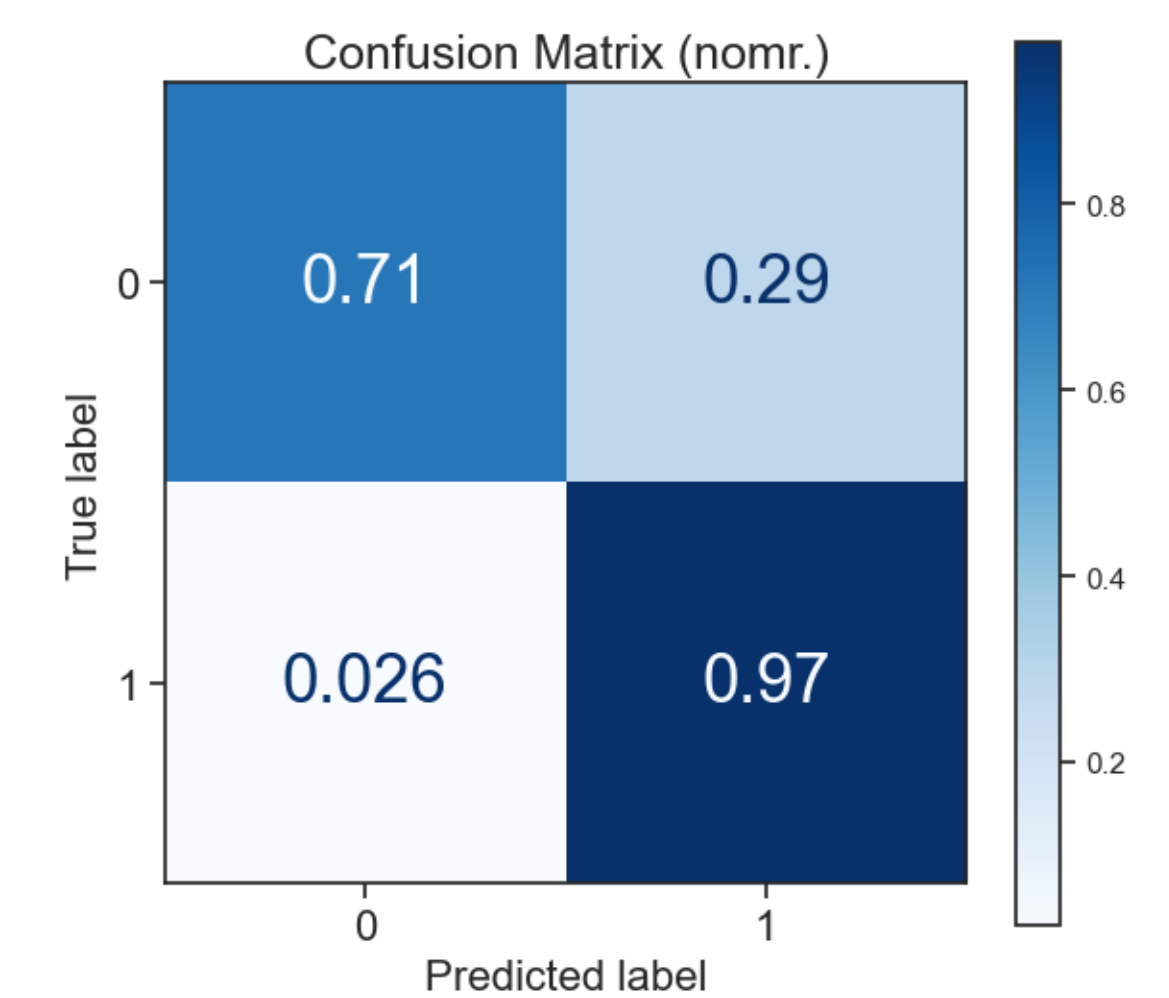
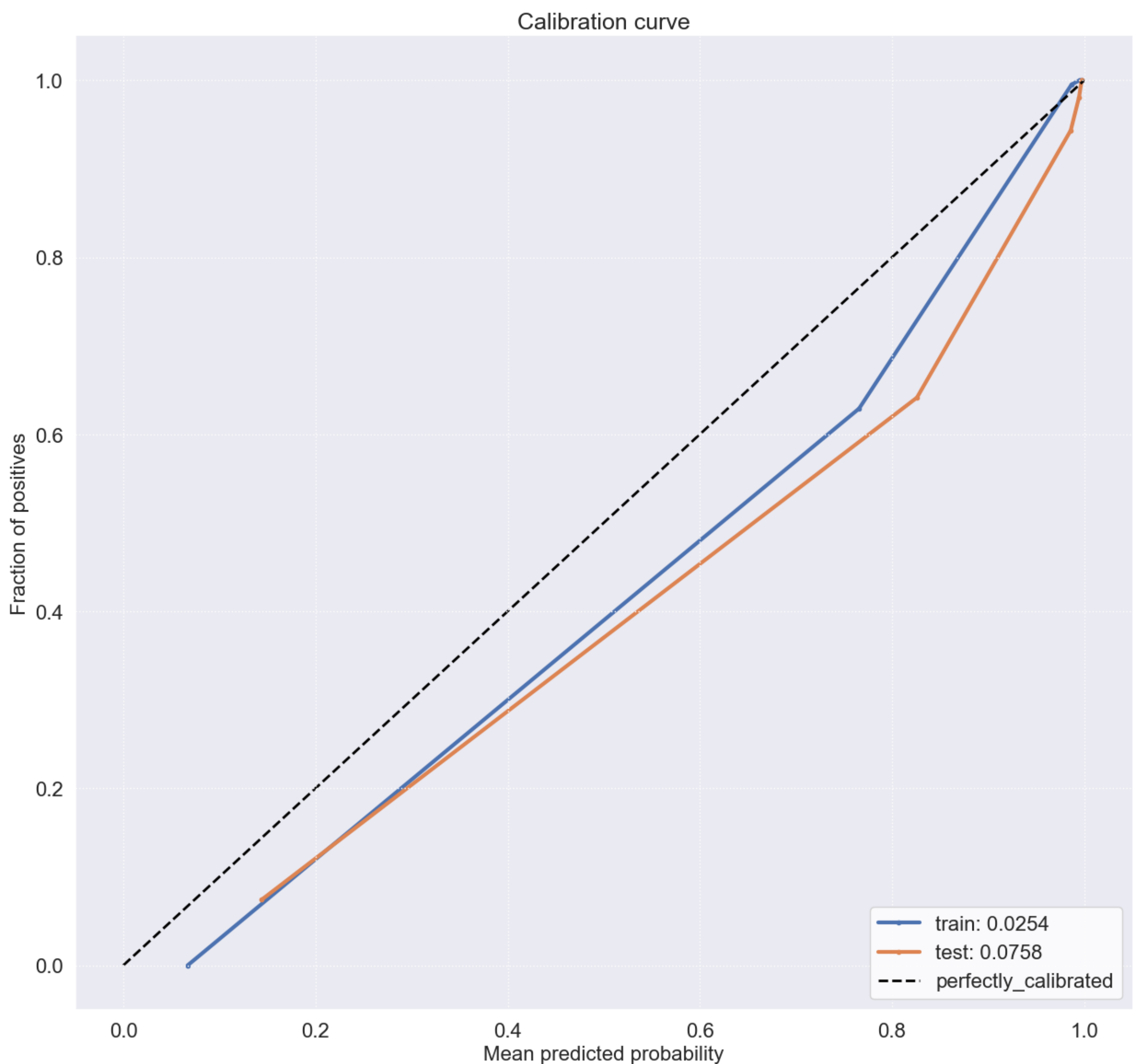
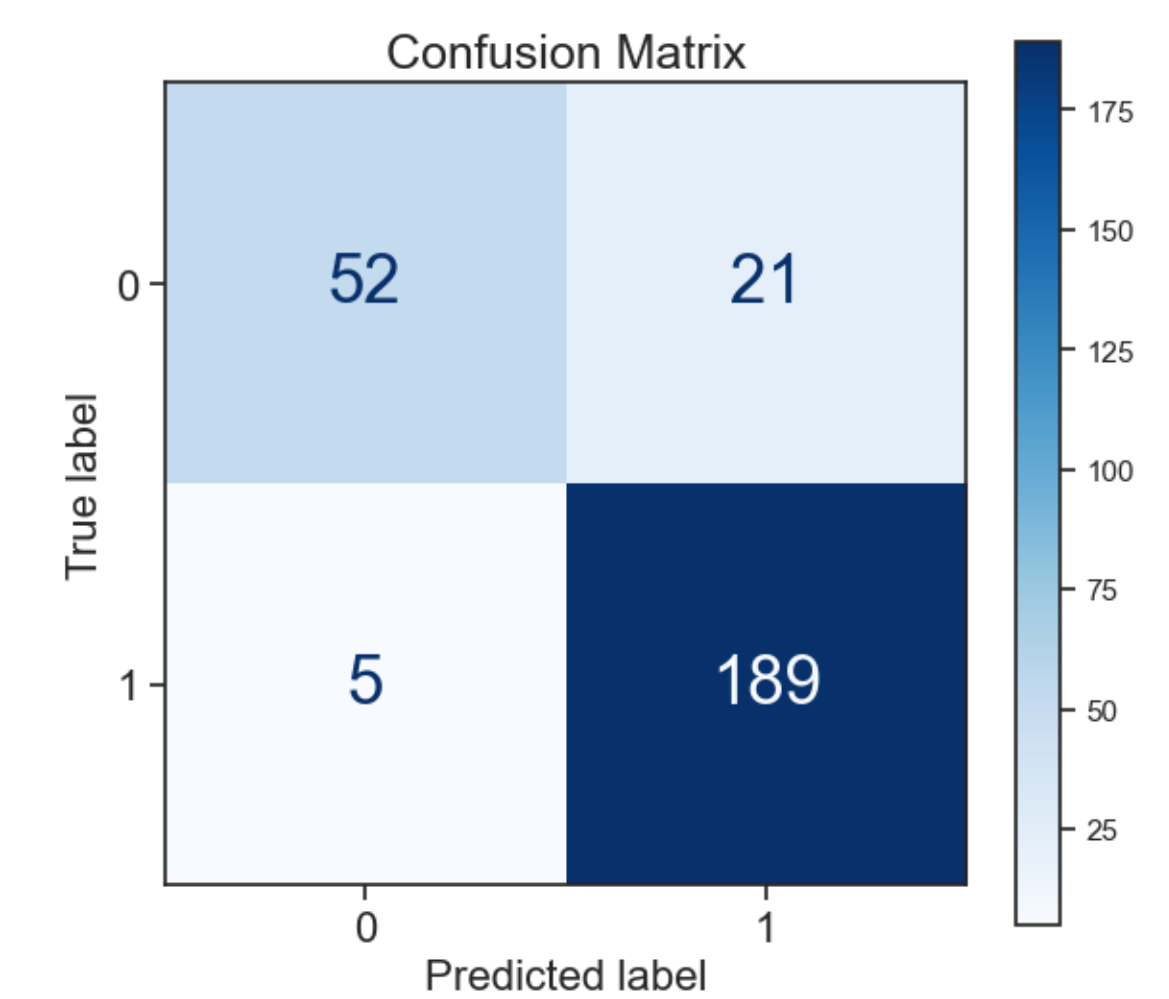
Metric	Train	Test
AUC	0.9994	0.9439
accuracy	0.9916	0.8989
balanced accuracy	0.9857	0.8535
recall_(sens)	0.9987	0.9536
specificity	0.9728	0.7534
precision	0.9898	0.9113
f1_score	0.9915	0.8967



Protein: P06401 - metric: f1



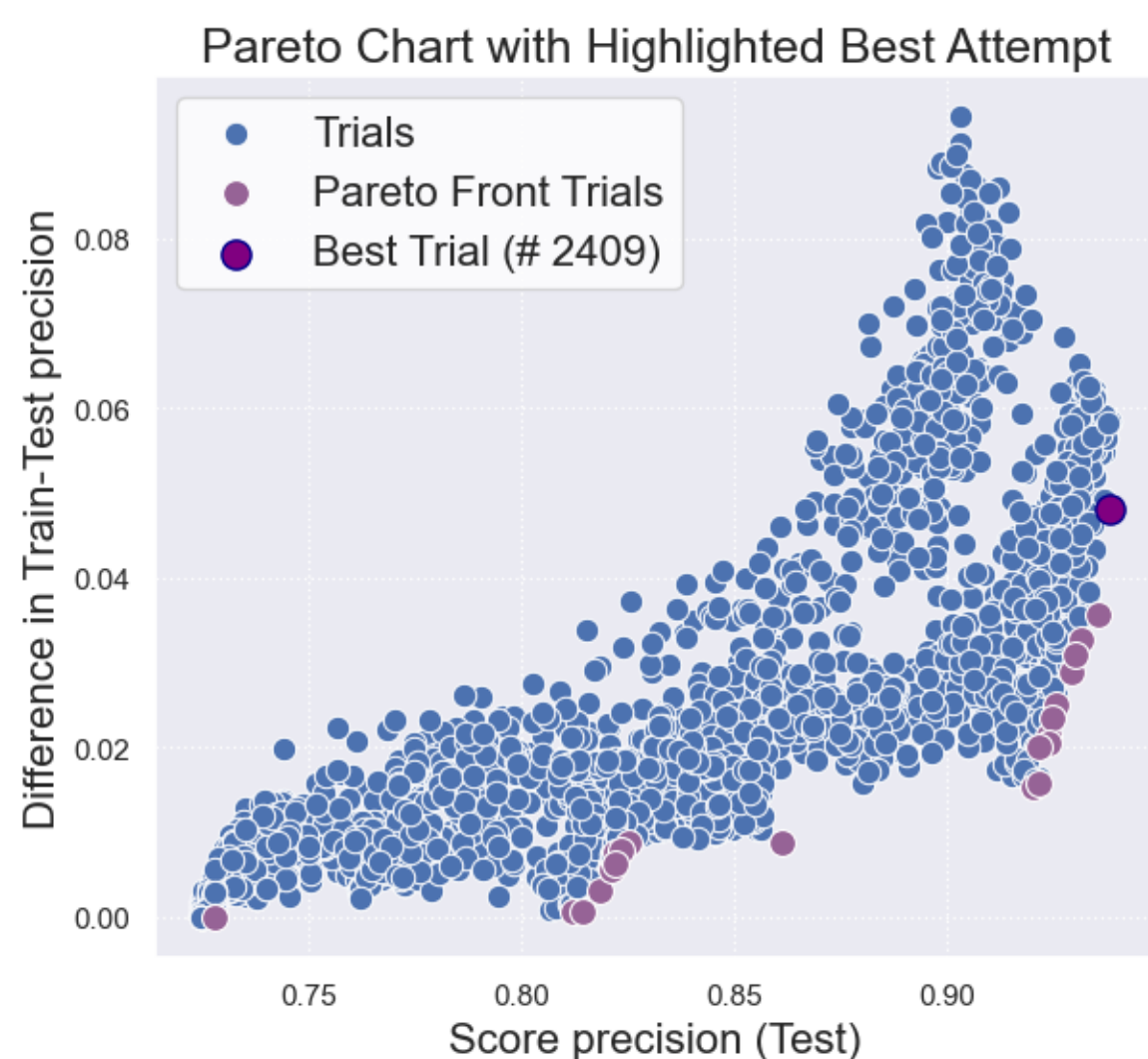
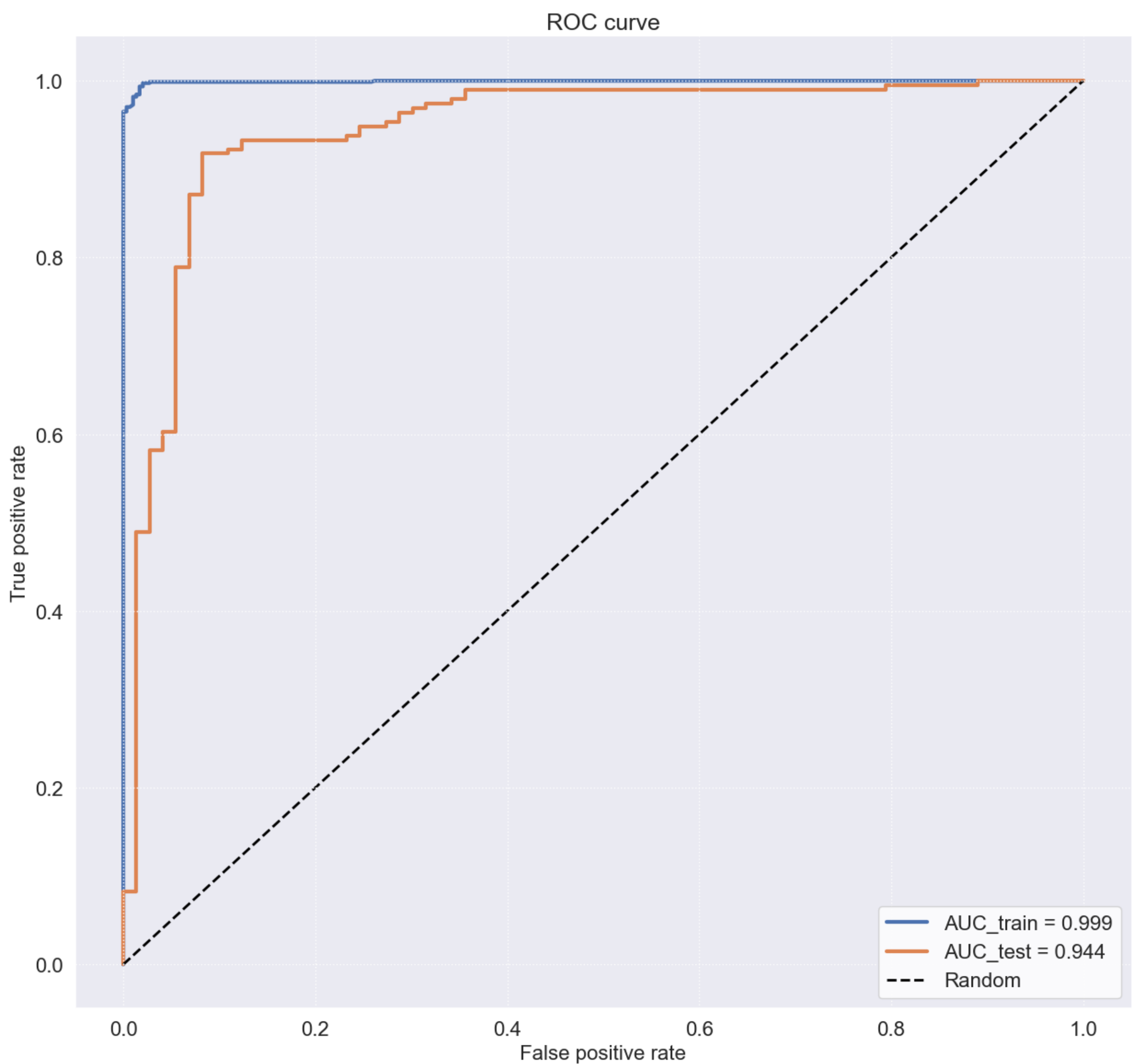
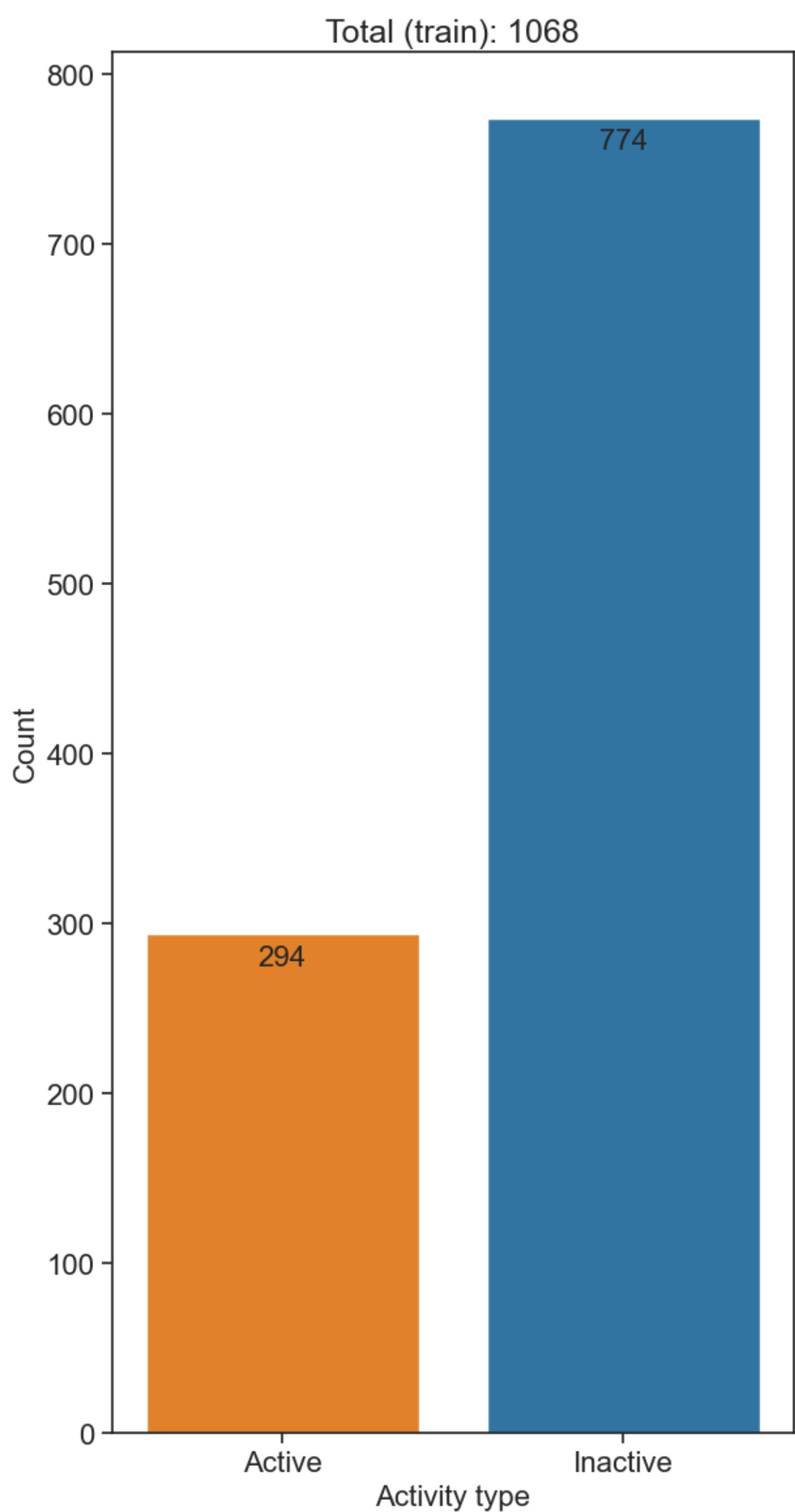
XGBoost Parameters	Value
alpha	2.5781
colsample_bytree	0.5842
gamma	0.9916
lambda	2.1106
learning_rate	0.024
max_depth	10.0
min_child_weight	1.0
n_estimators	599.0
reg_alpha	0.6739
reg_lambda	0.7337
scale_pos_weight	3.9049
subsample	0.6847



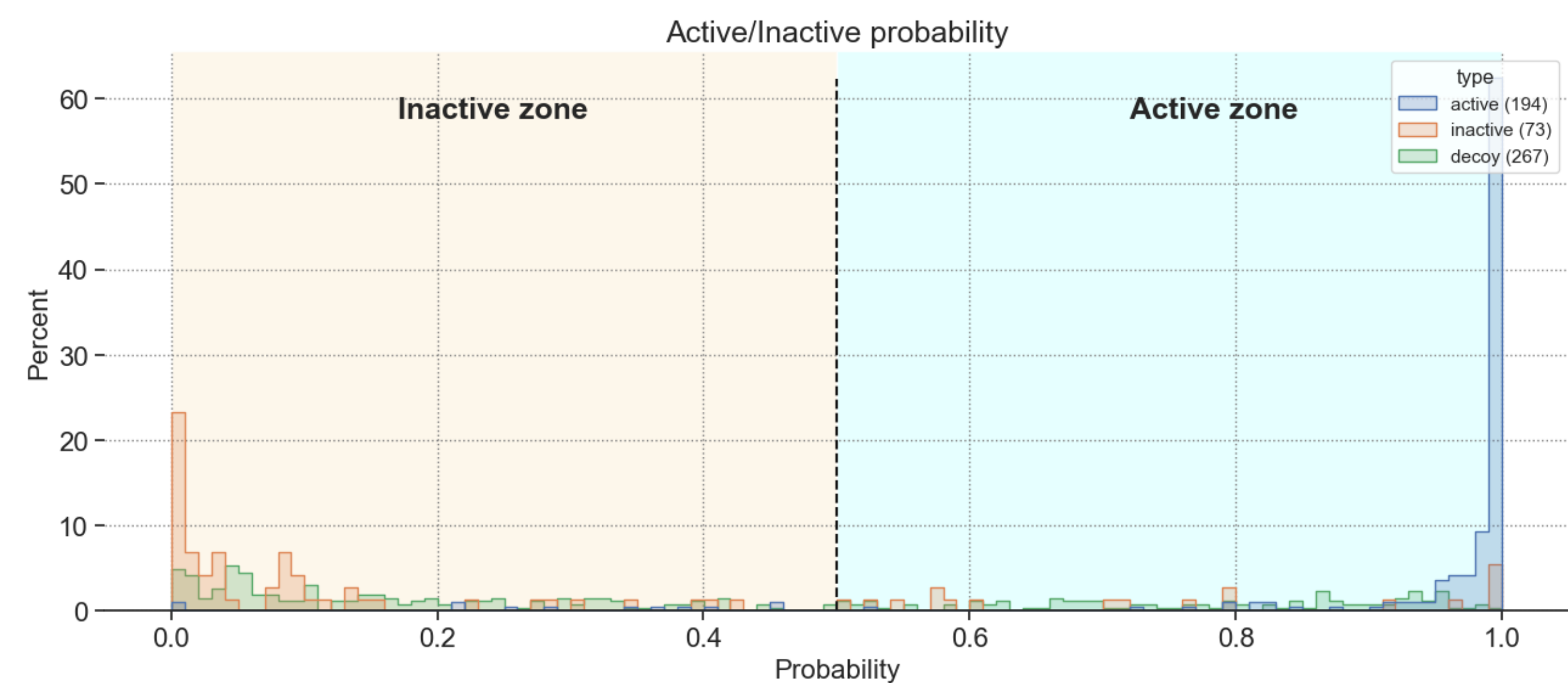
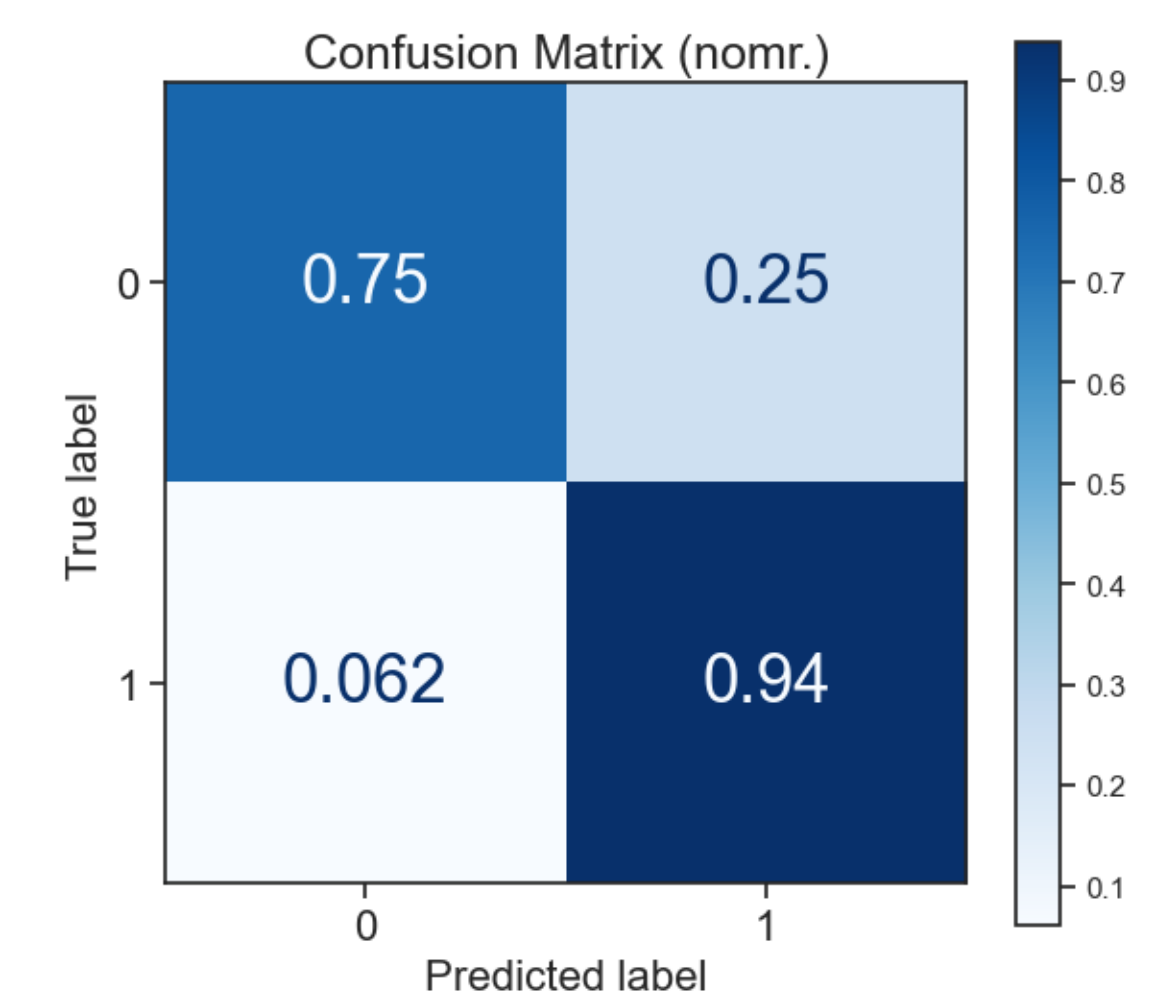
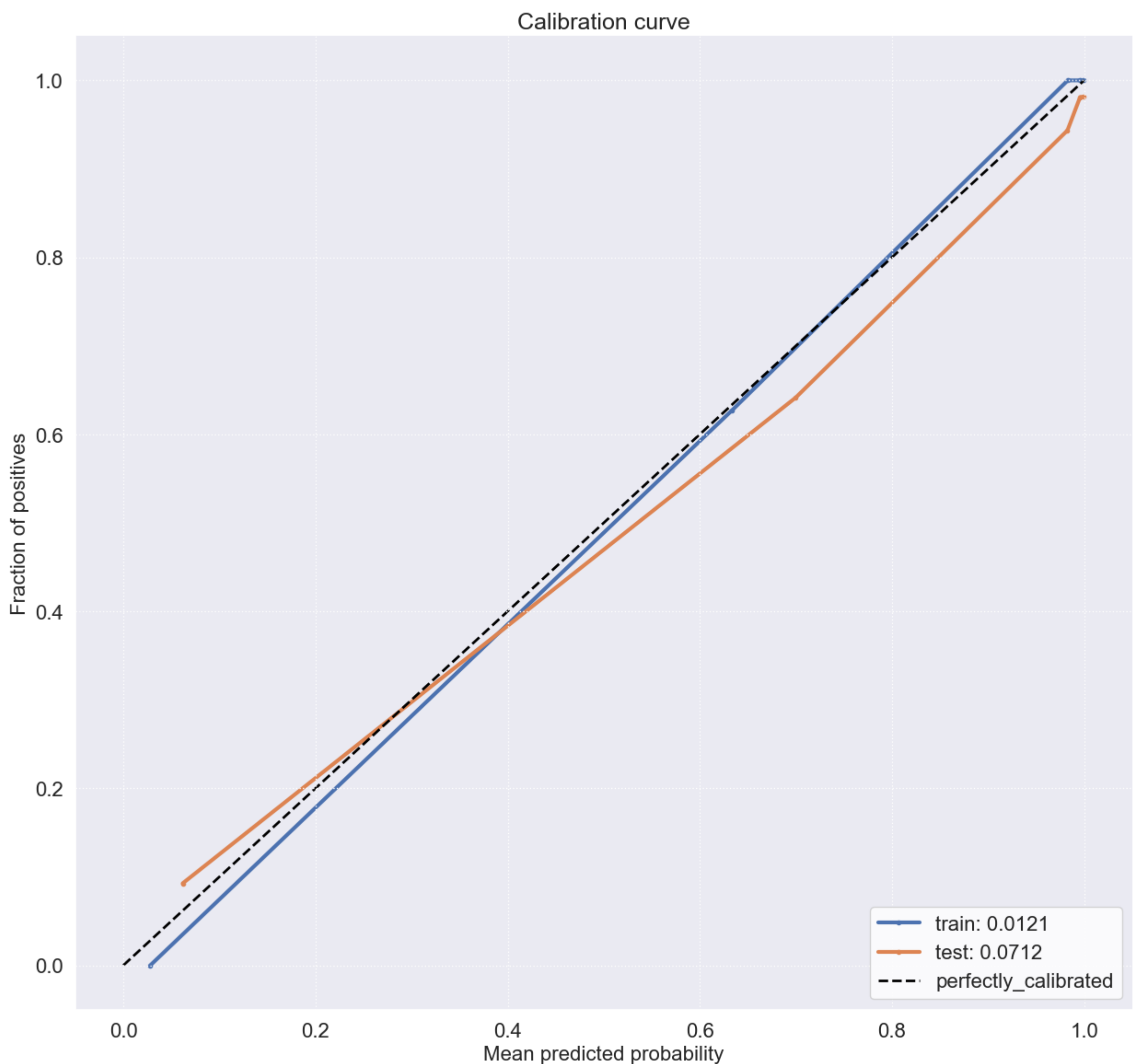
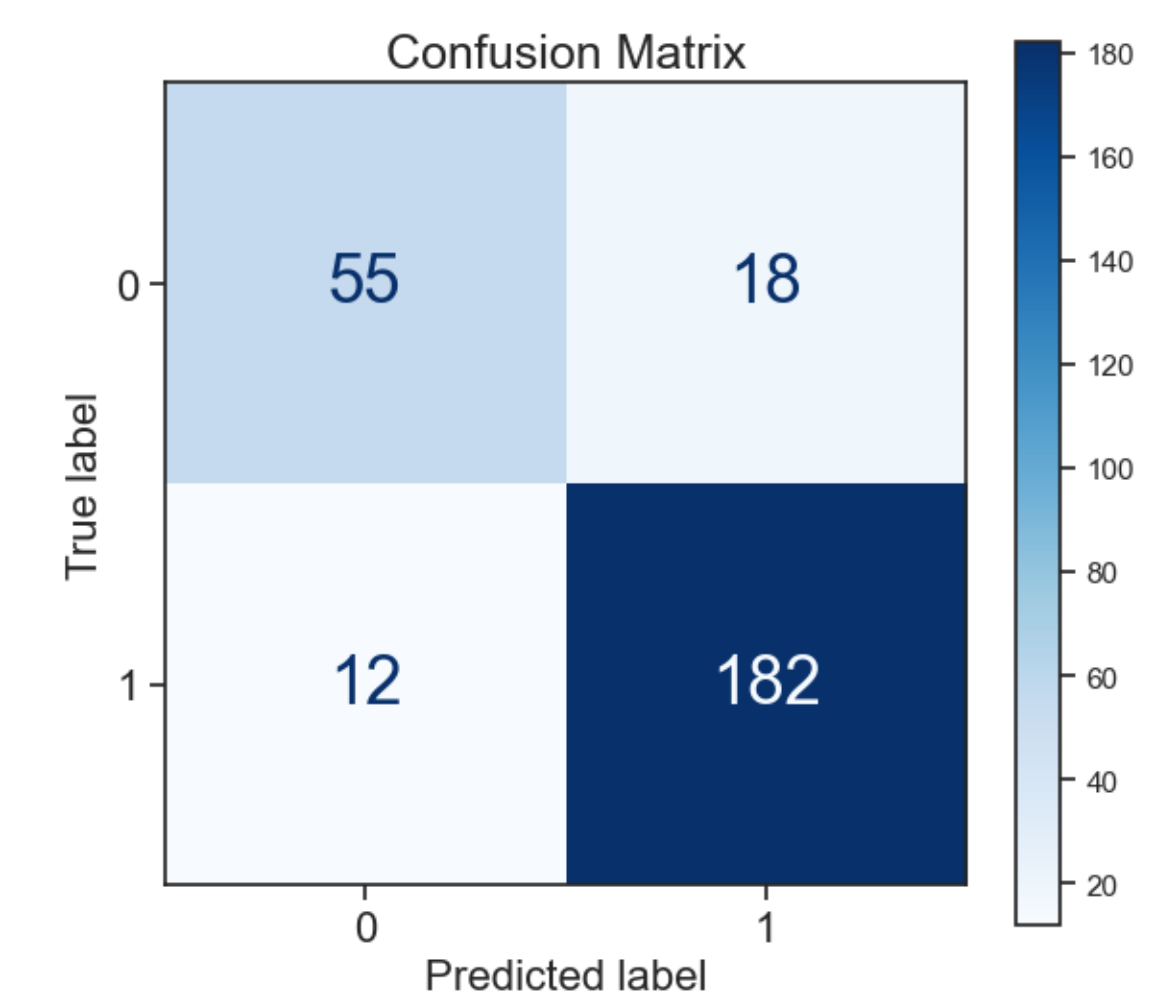
Metric	Train	Test
AUC	0.9981	0.9593
accuracy	0.9644	0.9026
balanced accuracy	0.9354	0.8433
recall_(sens)	1.0	0.9742
specificity	0.8707	0.7123
precision	0.9532	0.9
f1_score	0.9636	0.8986



Protein: P06401 - metric: precision



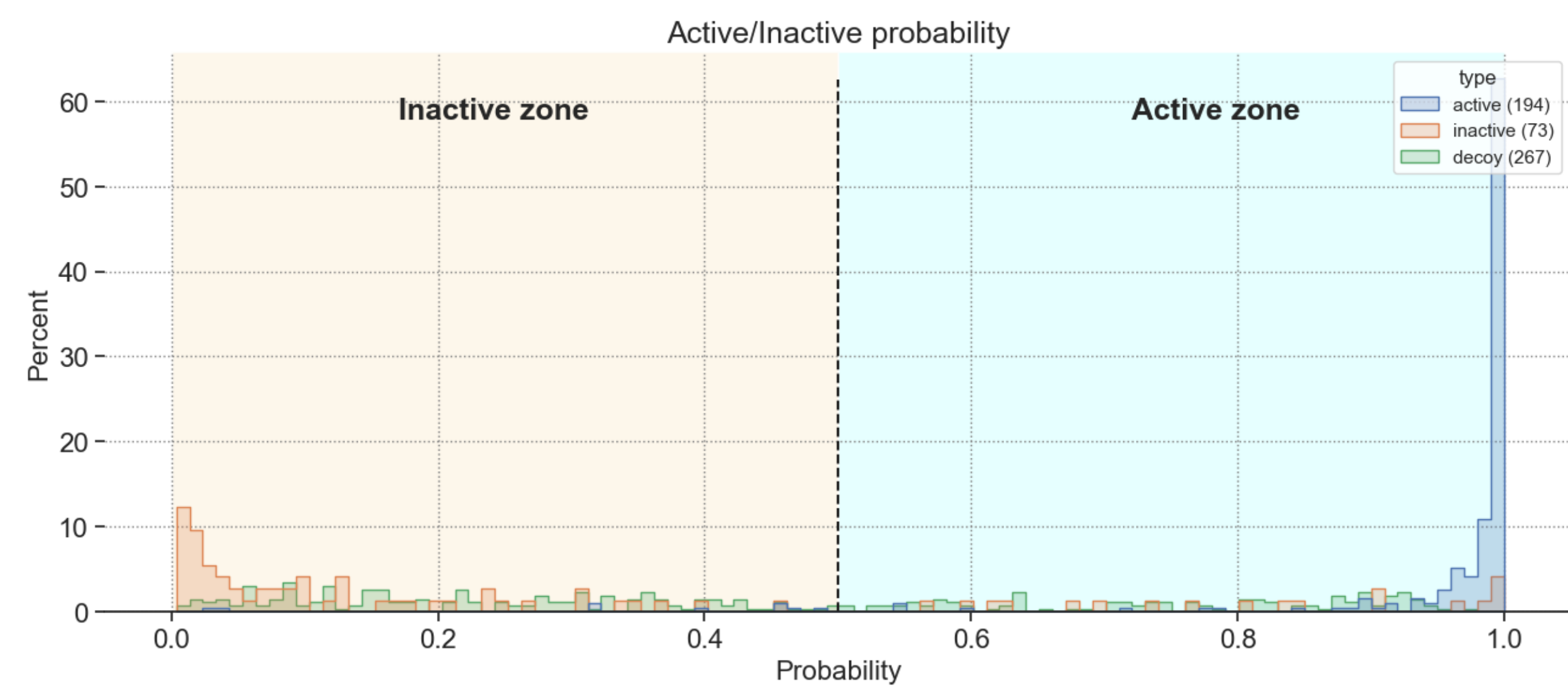
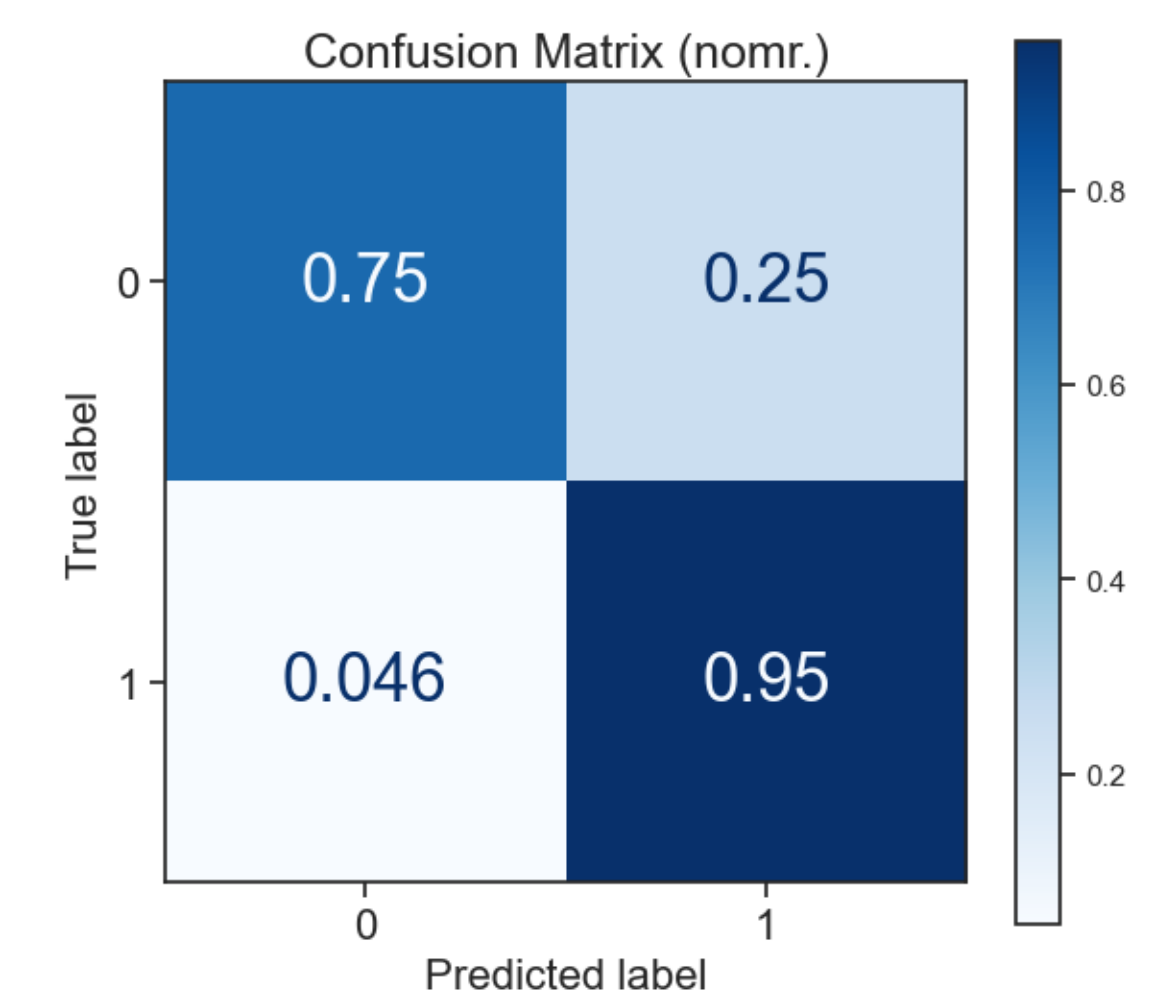
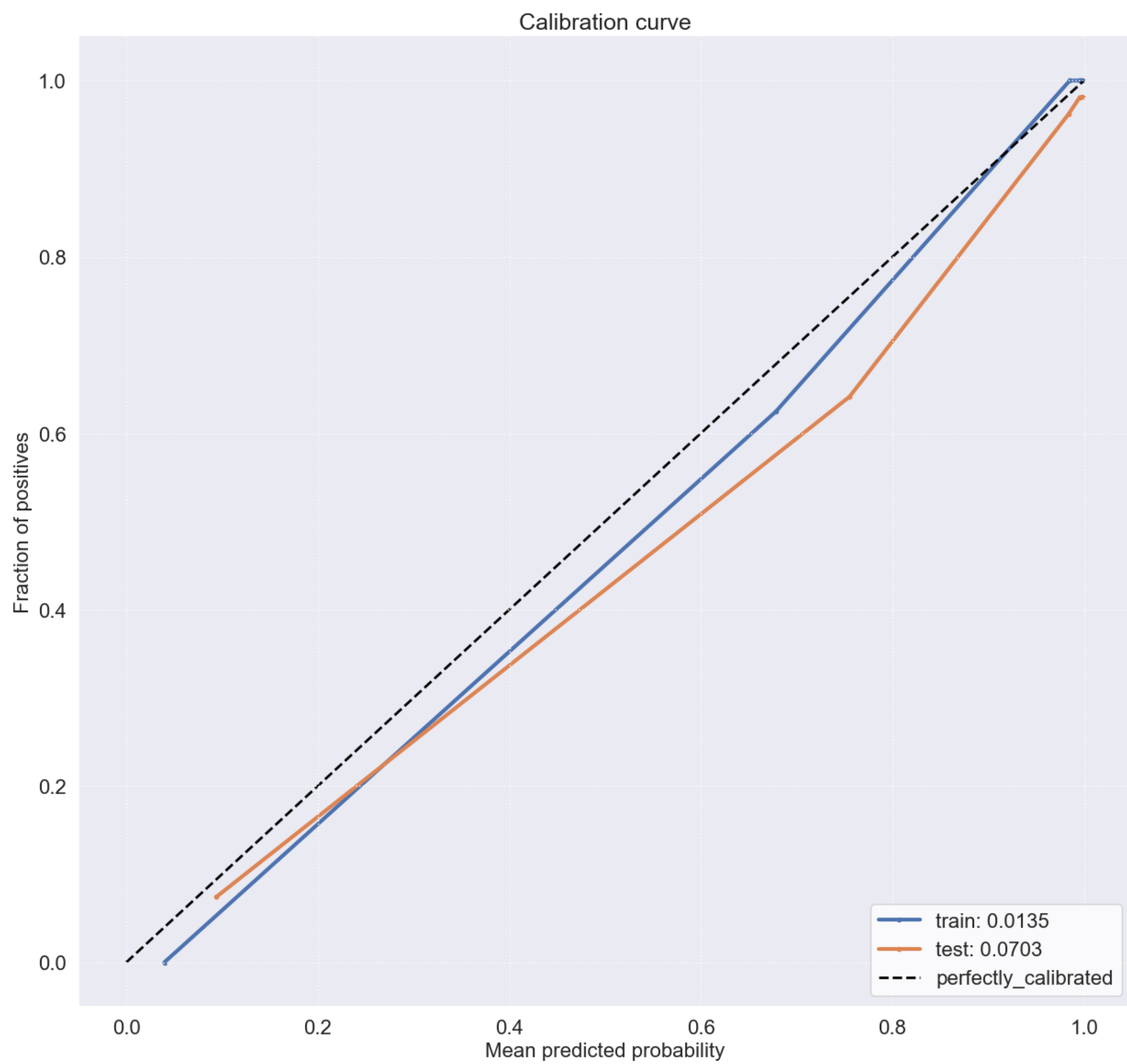
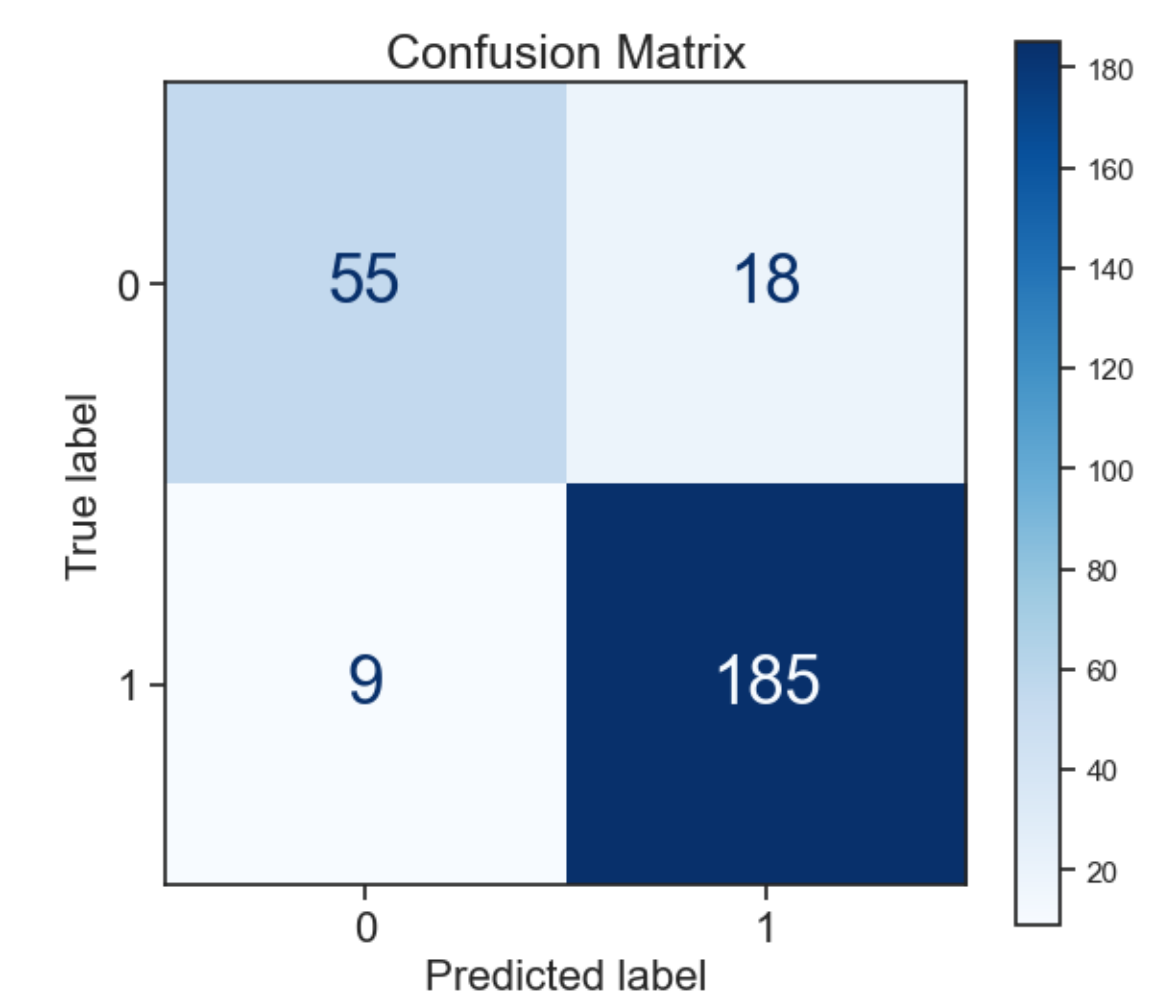
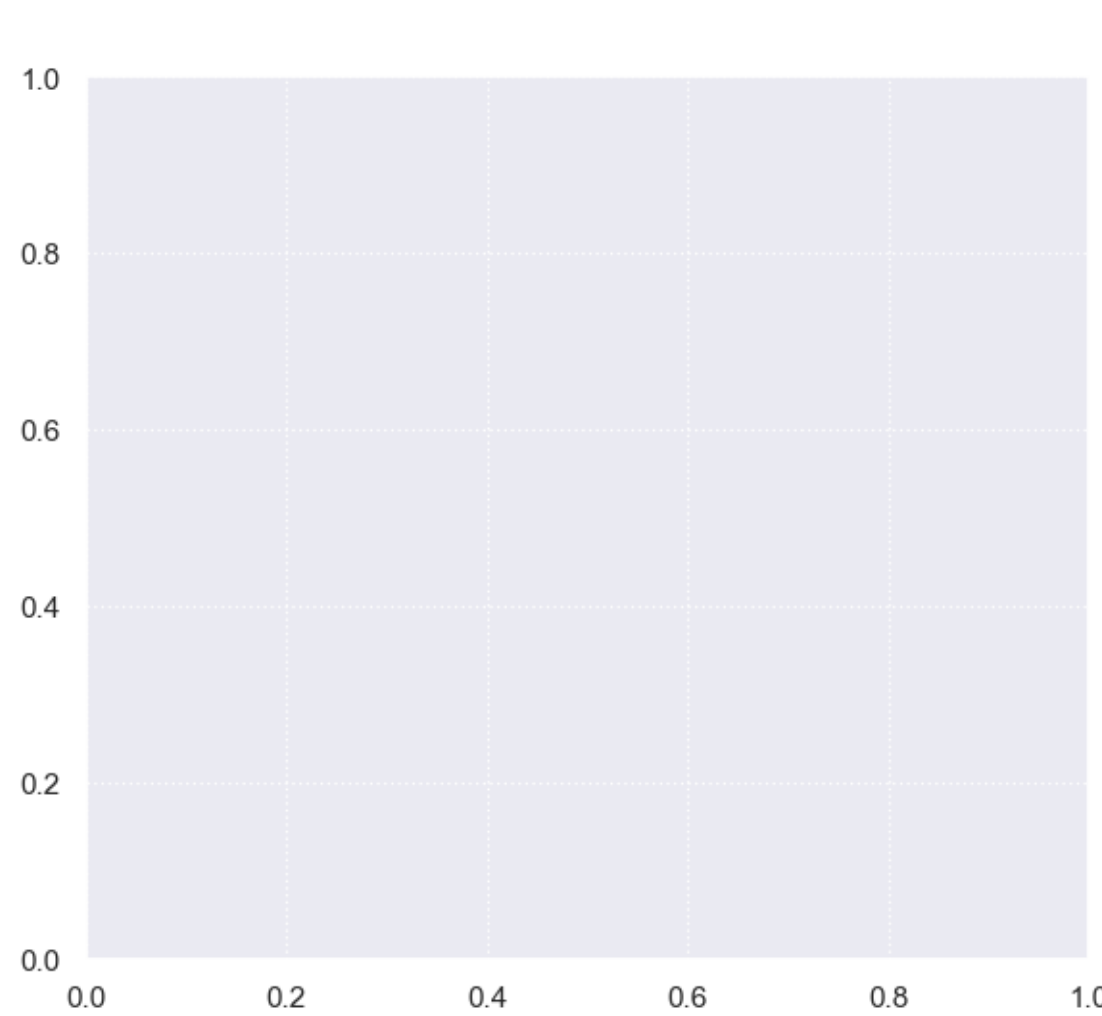
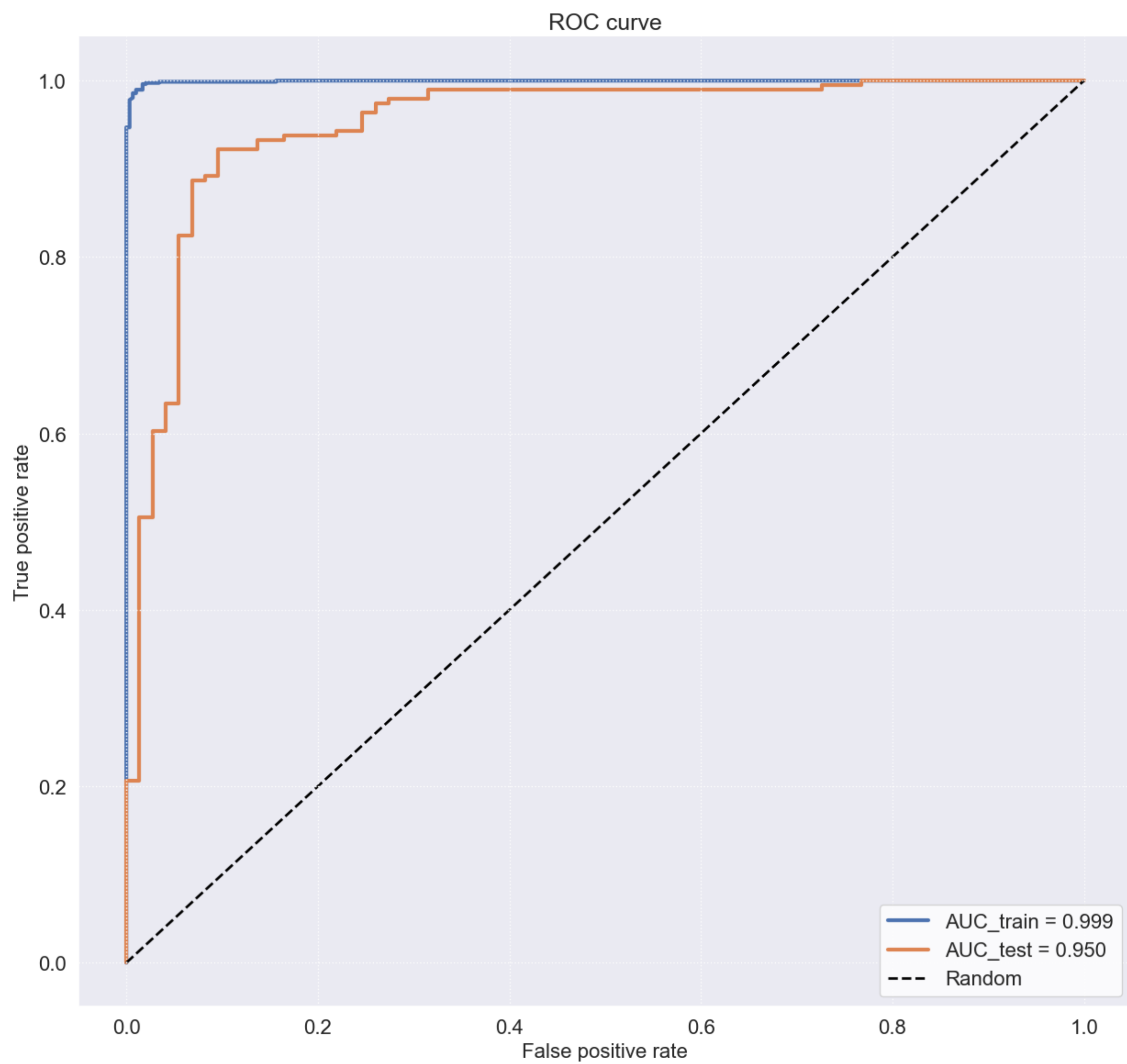
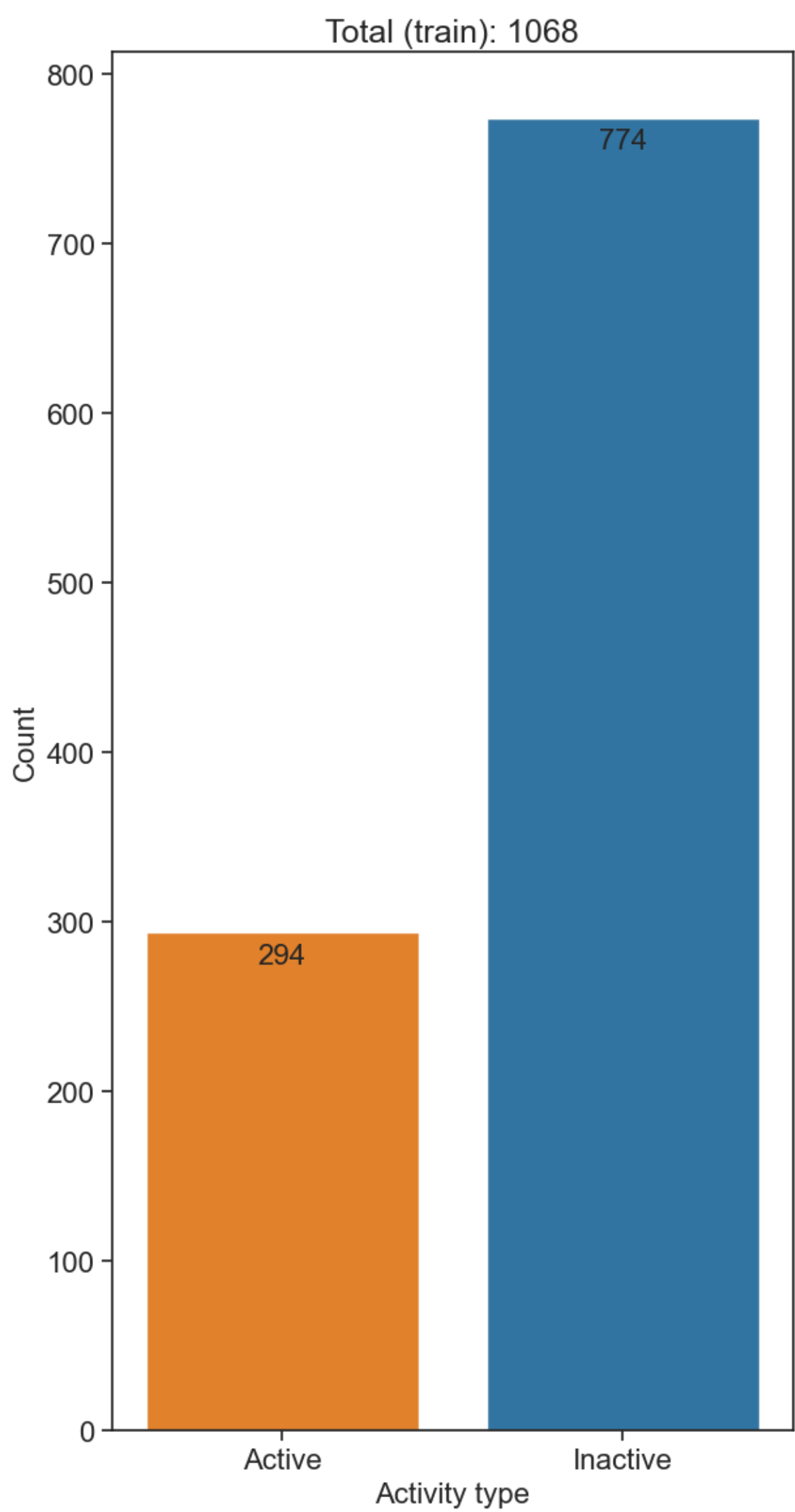
XGBoost Parameters	Value
alpha	1.9326
colsample_bytree	0.9025
gamma	0.5518
lambda	3.2674
learning_rate	0.1727
max_depth	7.0
min_child_weight	3.0
n_estimators	689.0
reg_alpha	0.0601
reg_lambda	0.4639
scale_pos_weight	1.1332
subsample	0.7843



Metric	Train	Test
AUC	0.9992	0.9441
accuracy	0.9878	0.8876
balanced accuracy	0.9789	0.8458
recall_(sens)	0.9987	0.9381
specificity	0.9592	0.7534
precision	0.9847	0.91
f1_score	0.9878	0.8861



Protein: P06401 - metric: SoftVotingXGBoostEnsemble



Metric	Train	Test
AUC	0.9994	0.9504
accuracy	0.9878	0.8989
balanced accuracy	0.9789	0.8535
recall_(sens)	0.9987	0.9536
specificity	0.9592	0.7534
precision	0.9847	0.9113
f1_score	0.9878	0.8967