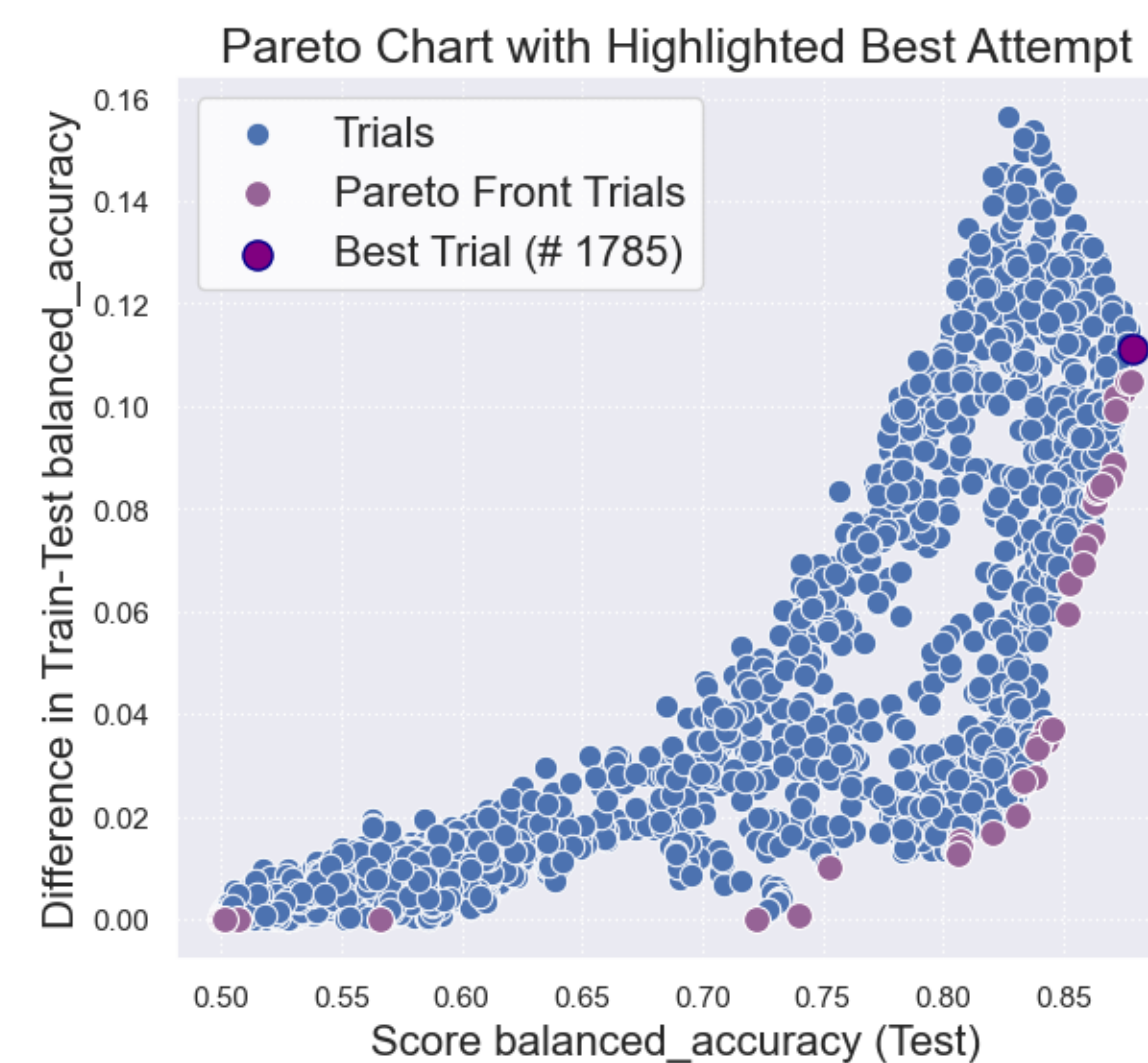
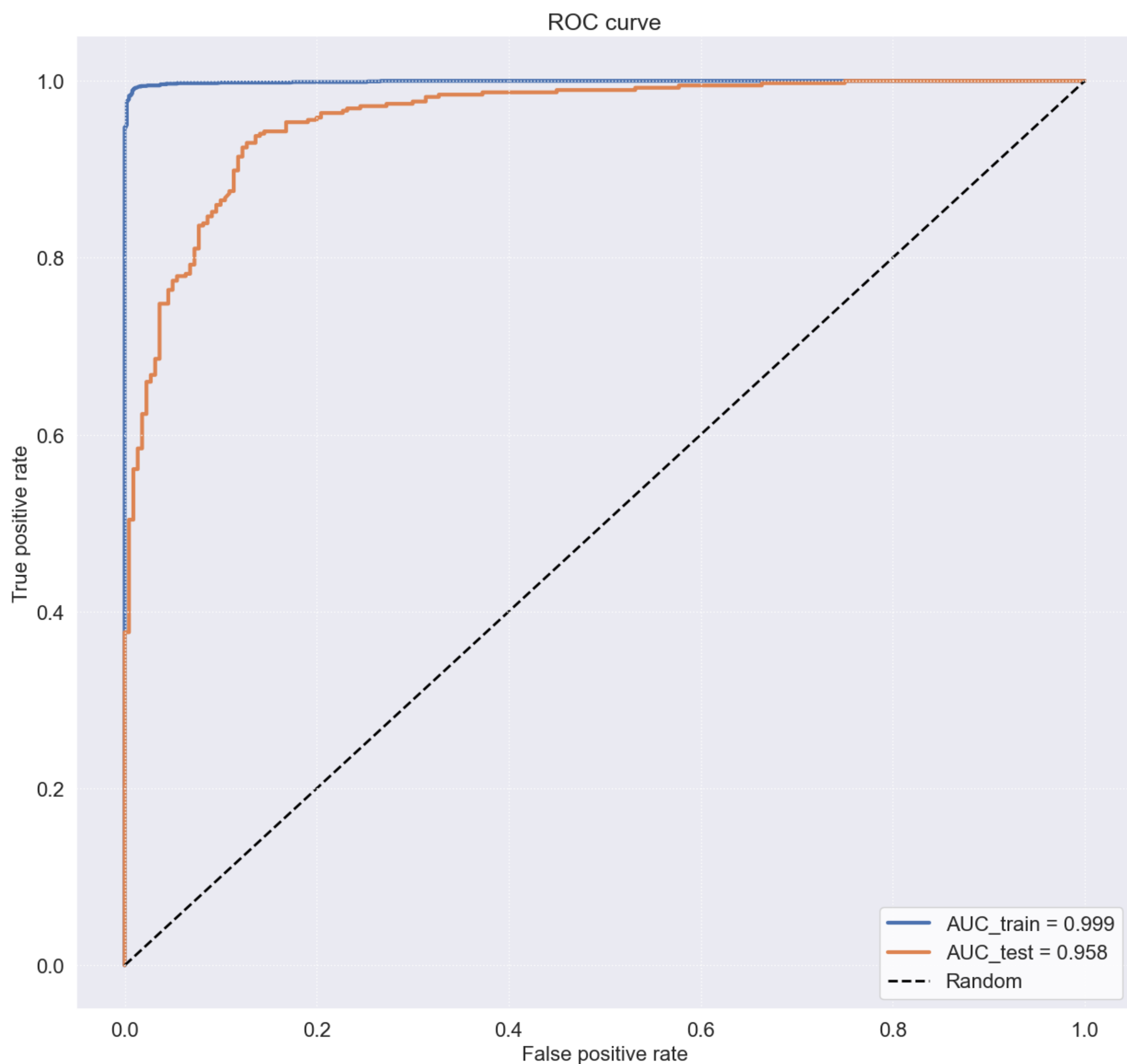
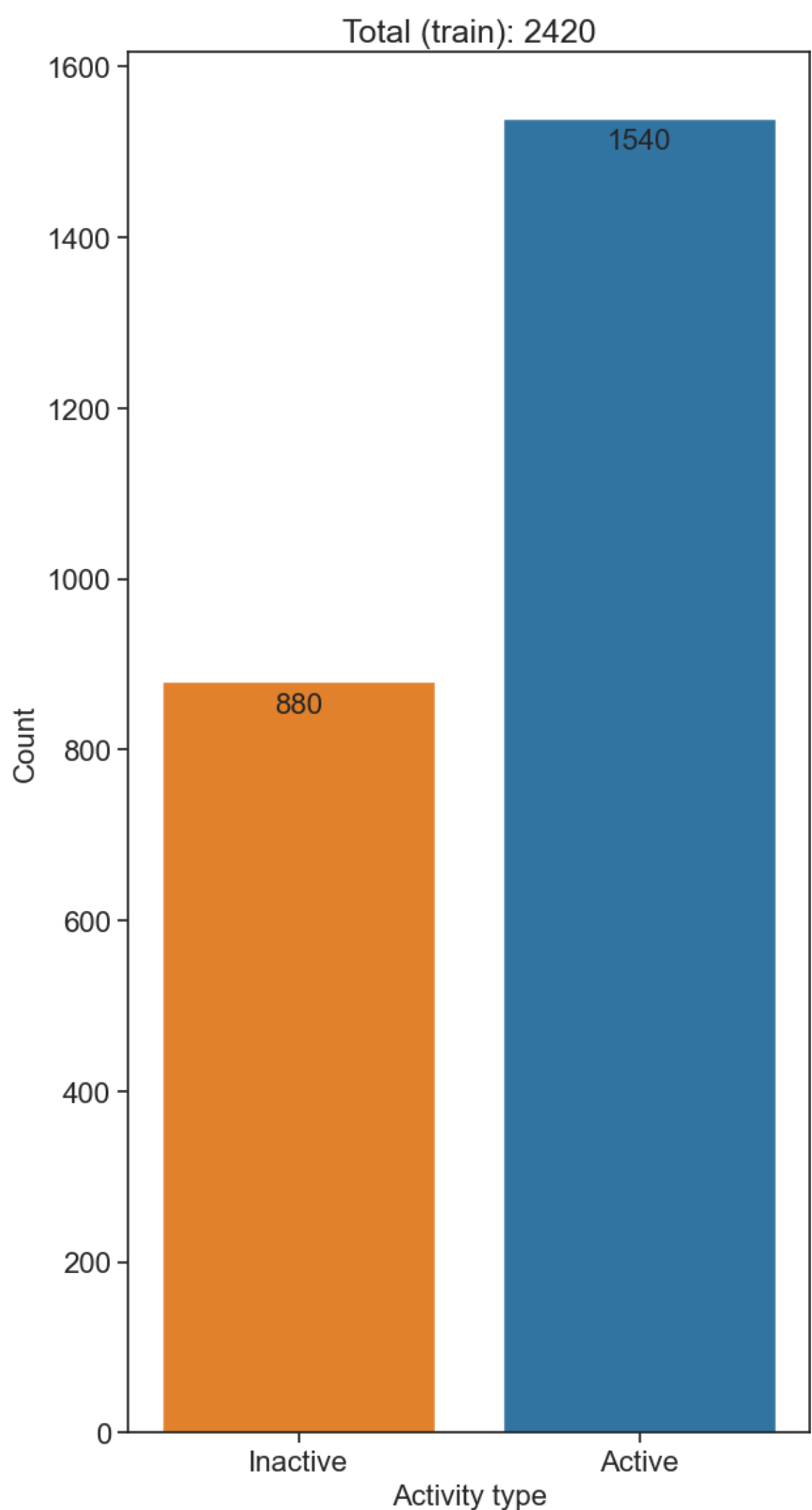
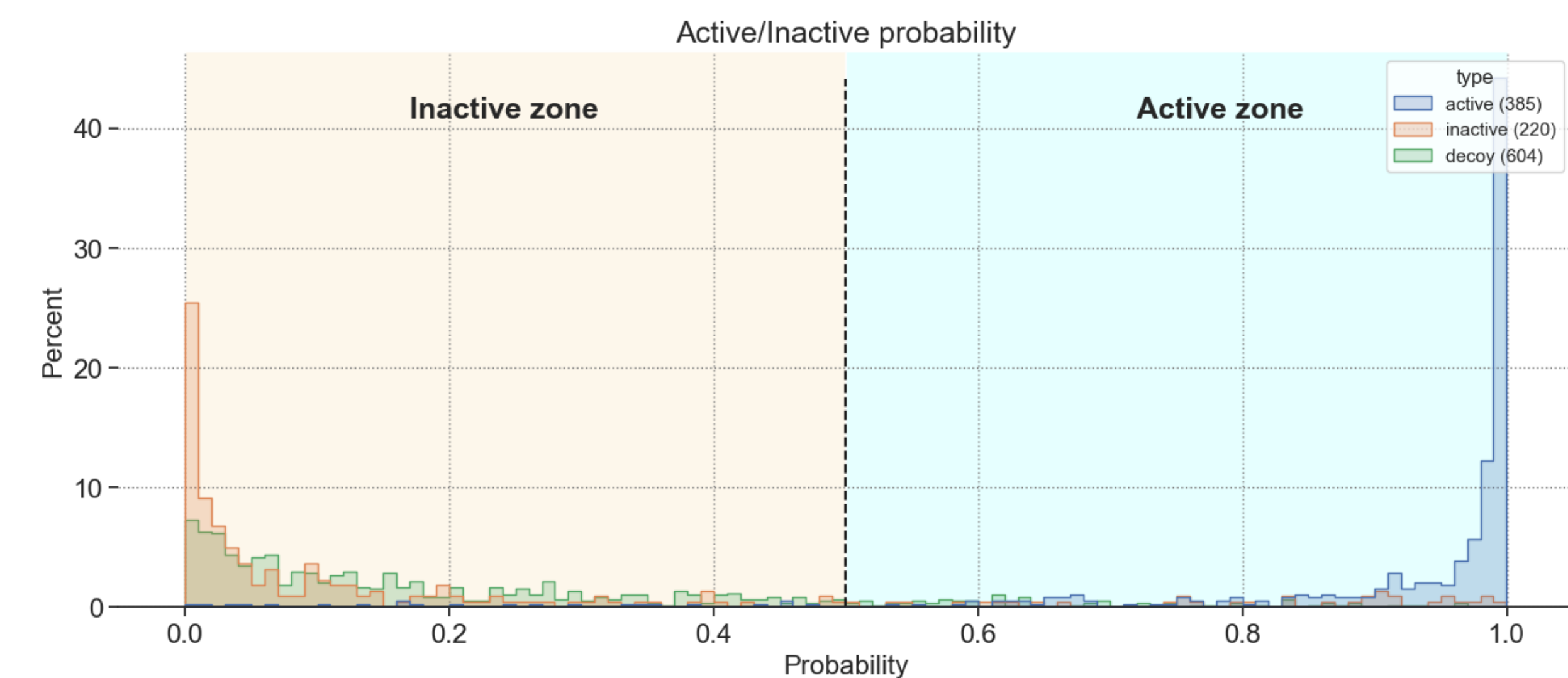
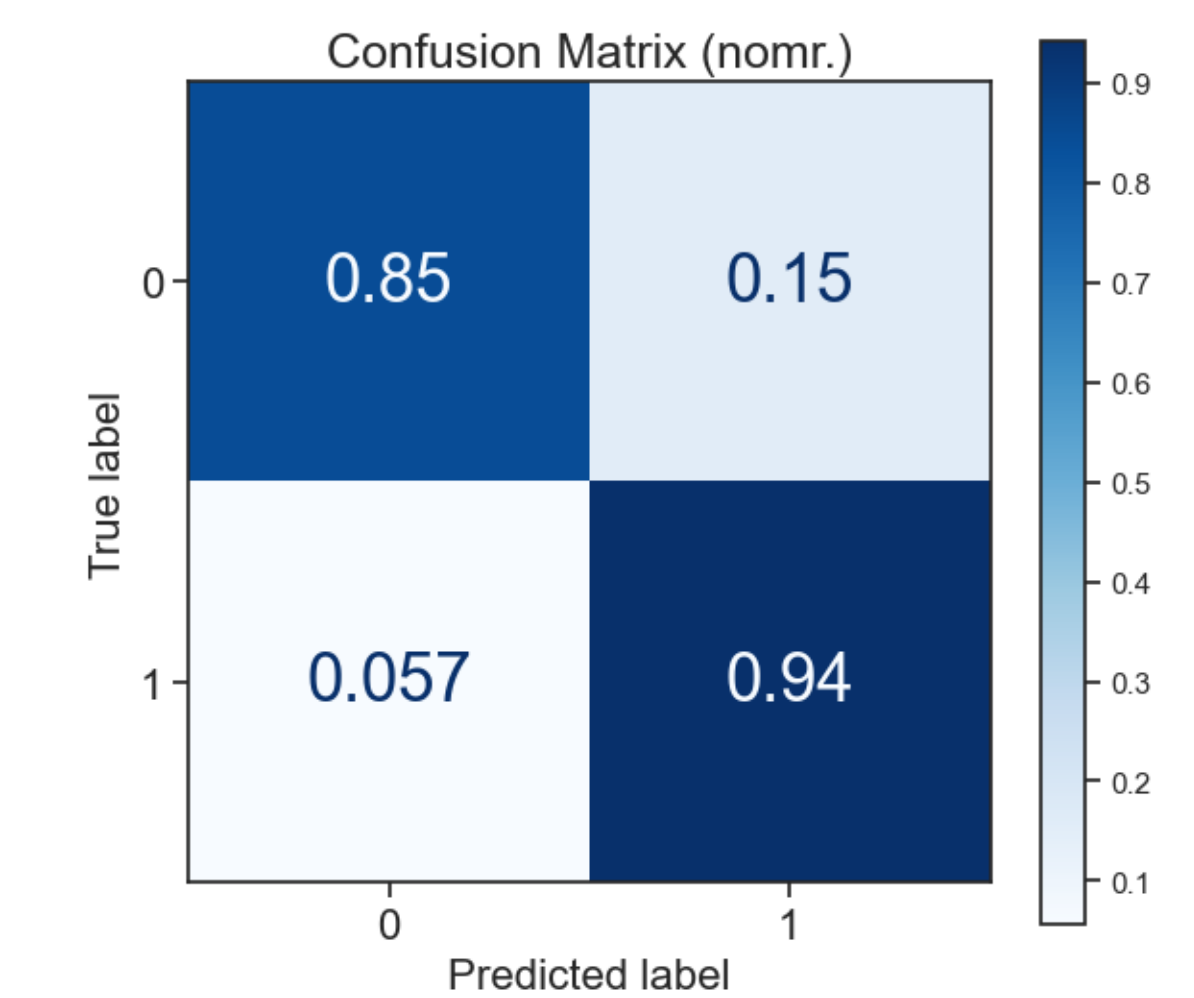
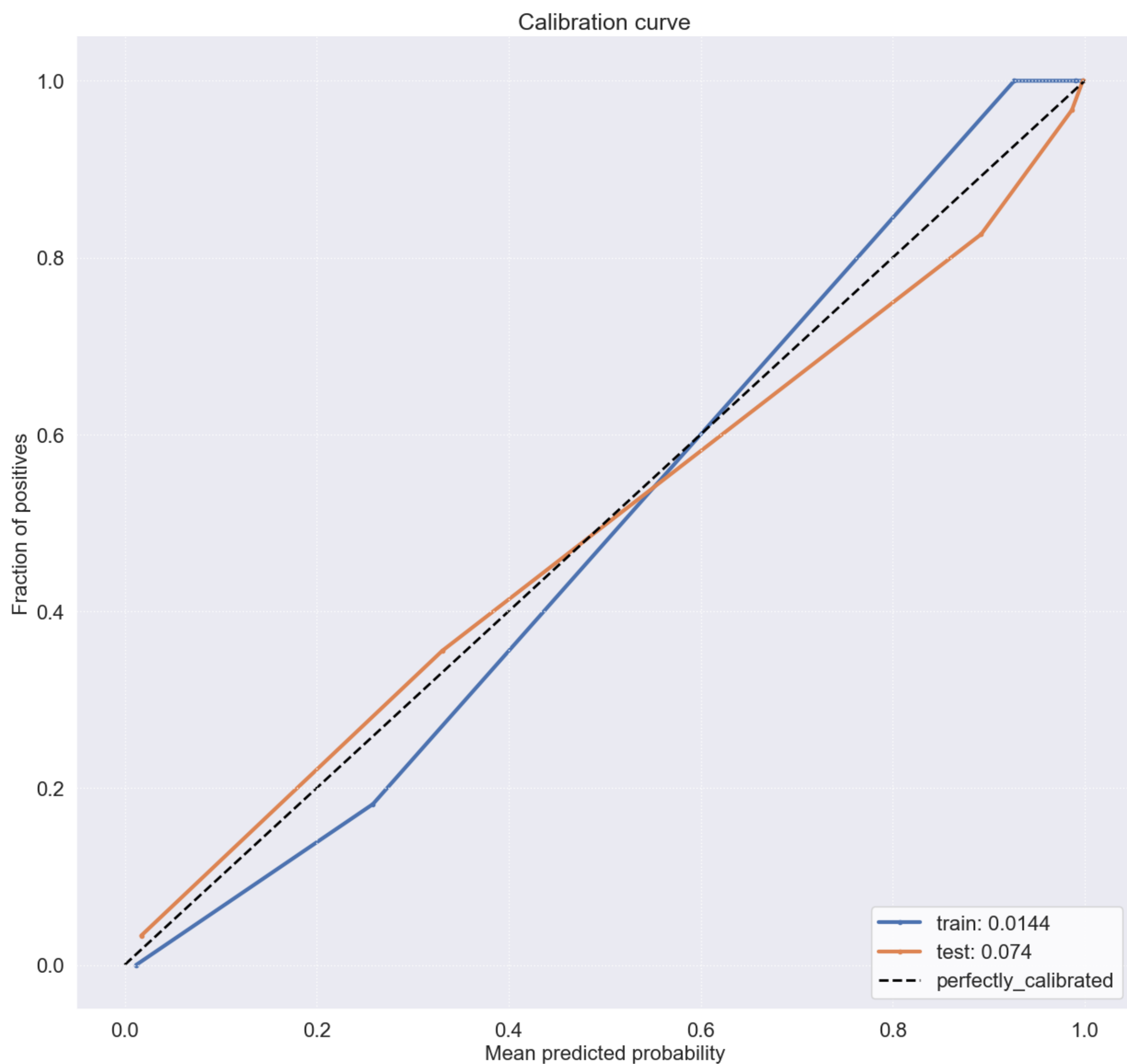
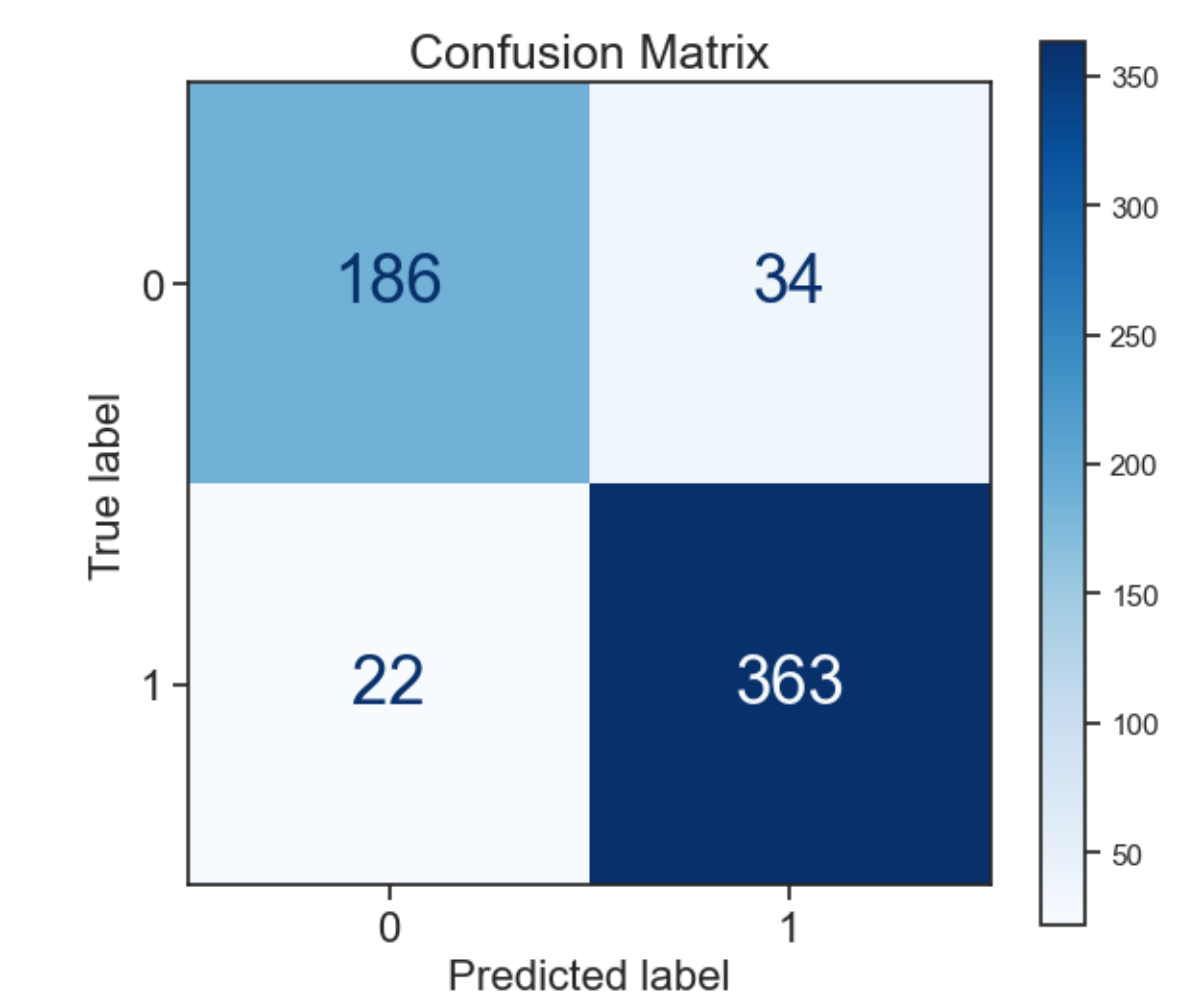


Protein: Q9Y5N1 - metric: balanced_accuracy

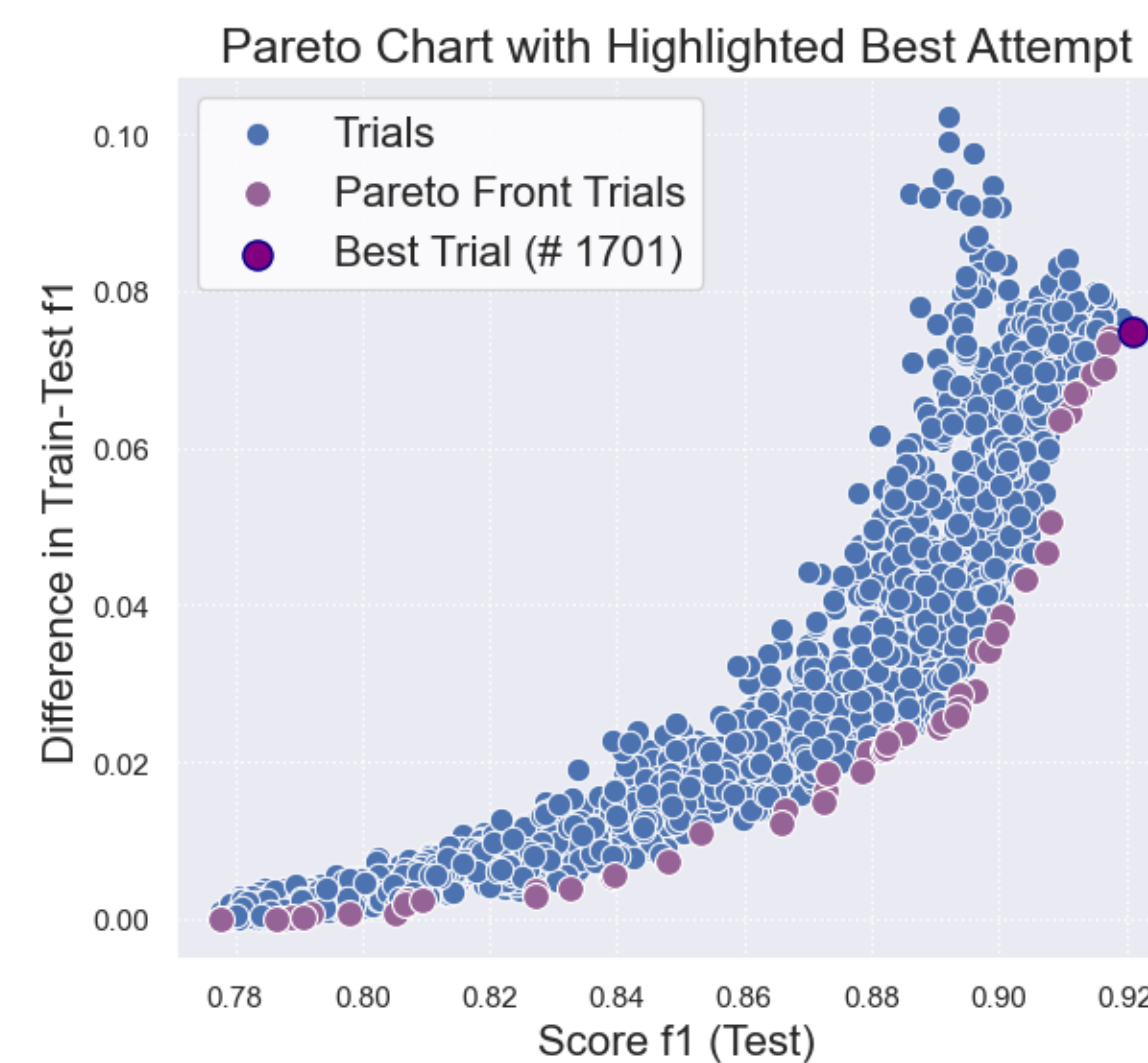
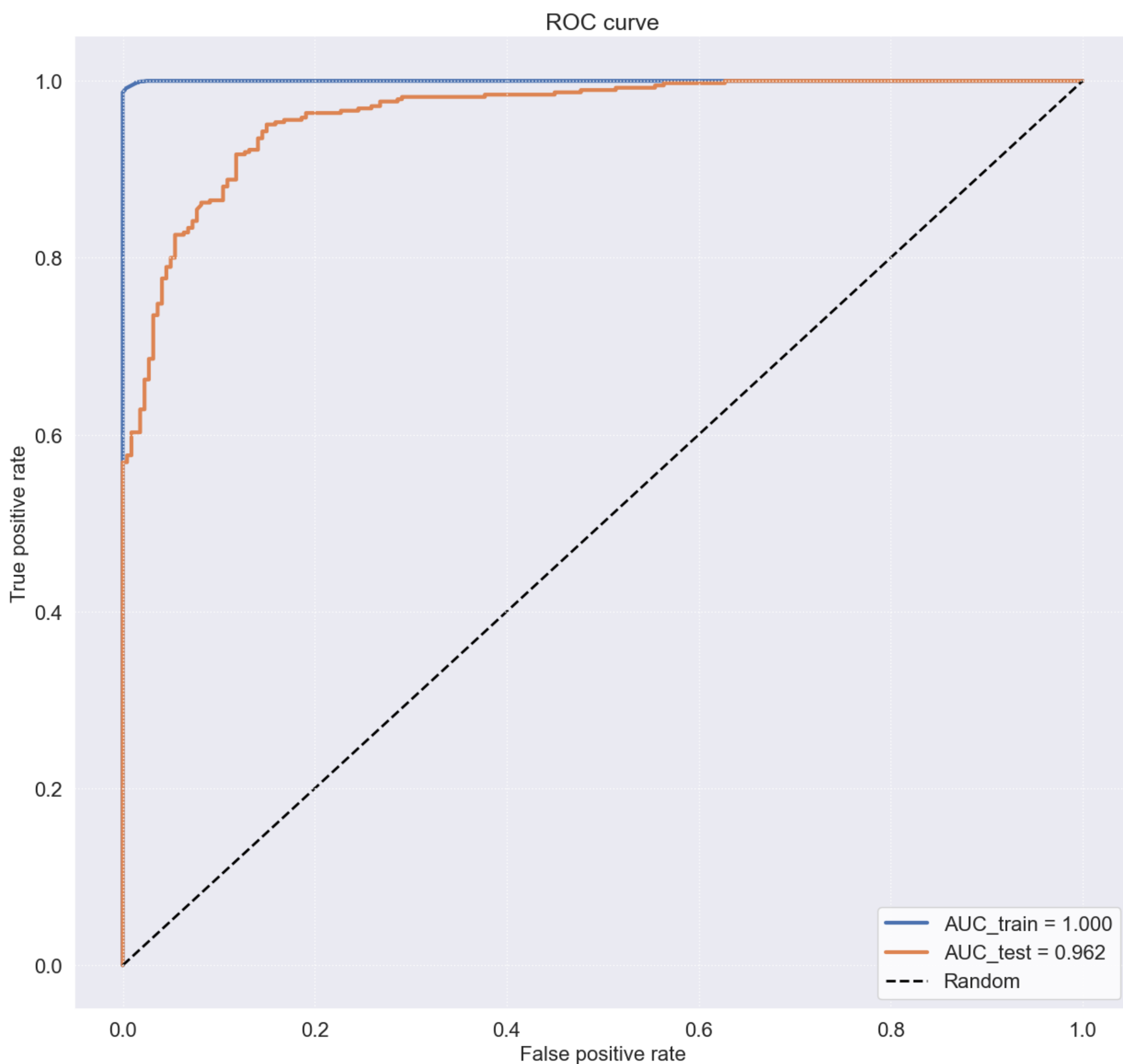
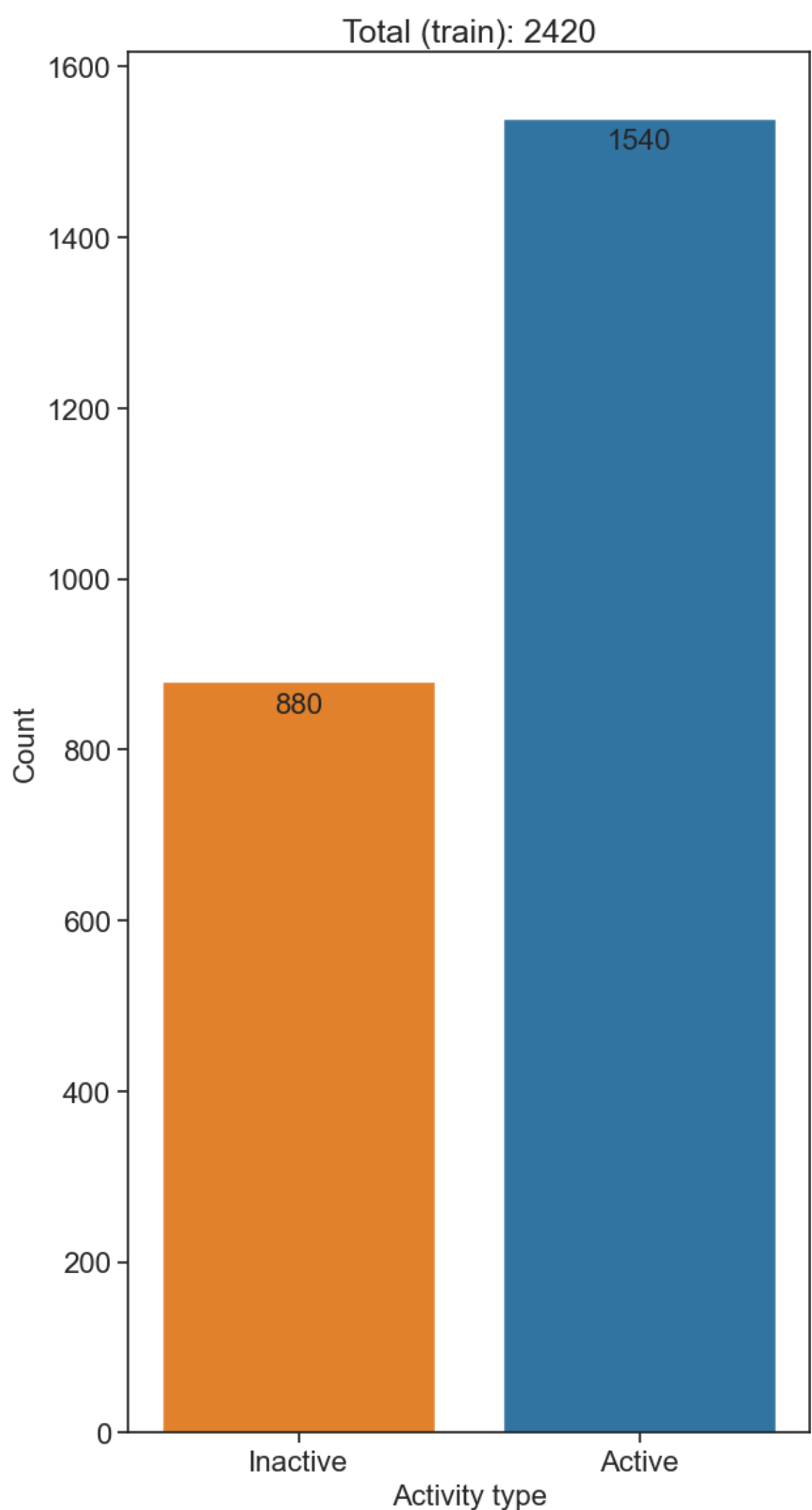


XGBoost Parameters	Value
alpha	2.0062
colsample_bytree	0.6769
gamma	0.2002
lambda	2.4677
learning_rate	0.0942
max_depth	6.0
min_child_weight	2.0
n_estimators	888.0
reg_alpha	0.6371
reg_lambda	0.7143
scale_pos_weight	1.017
subsample	0.7495

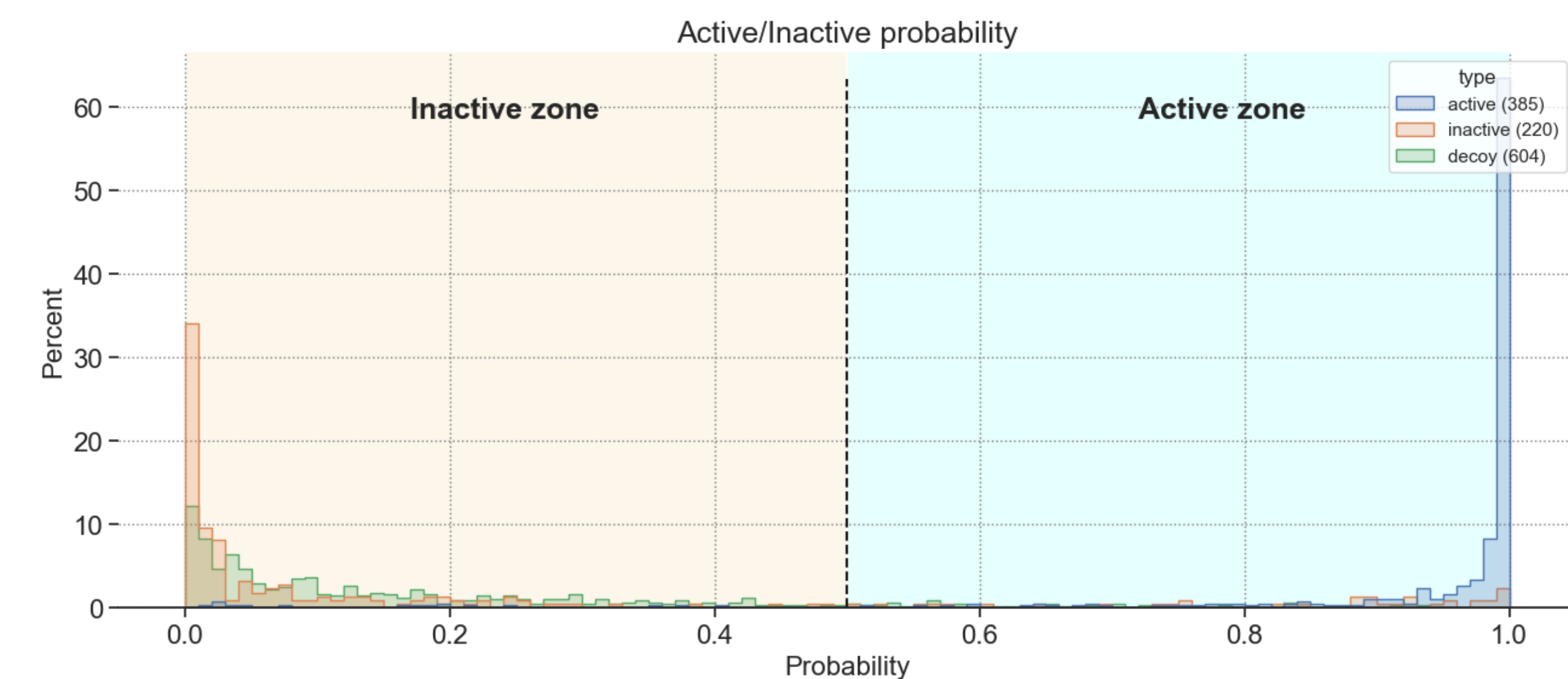
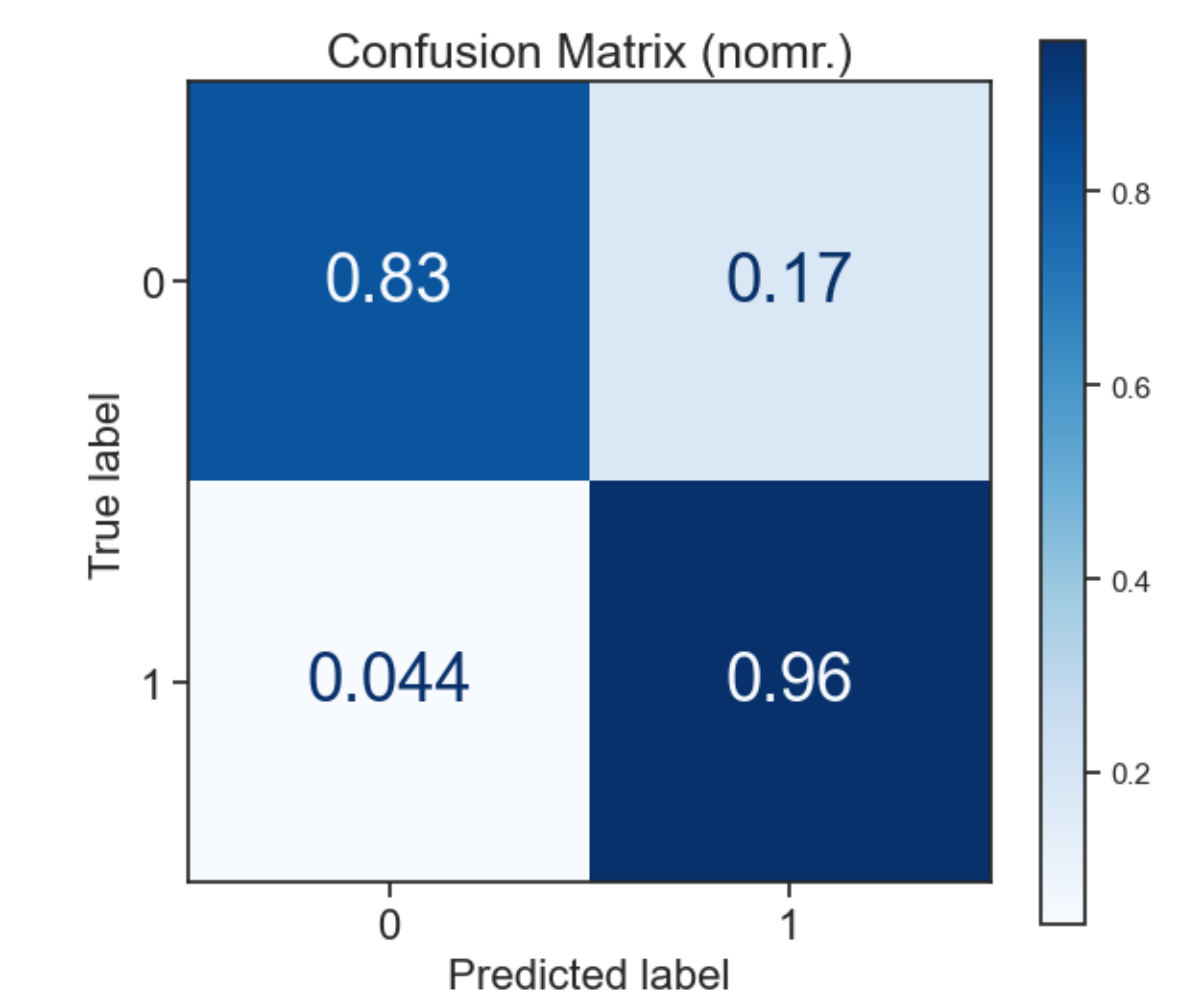
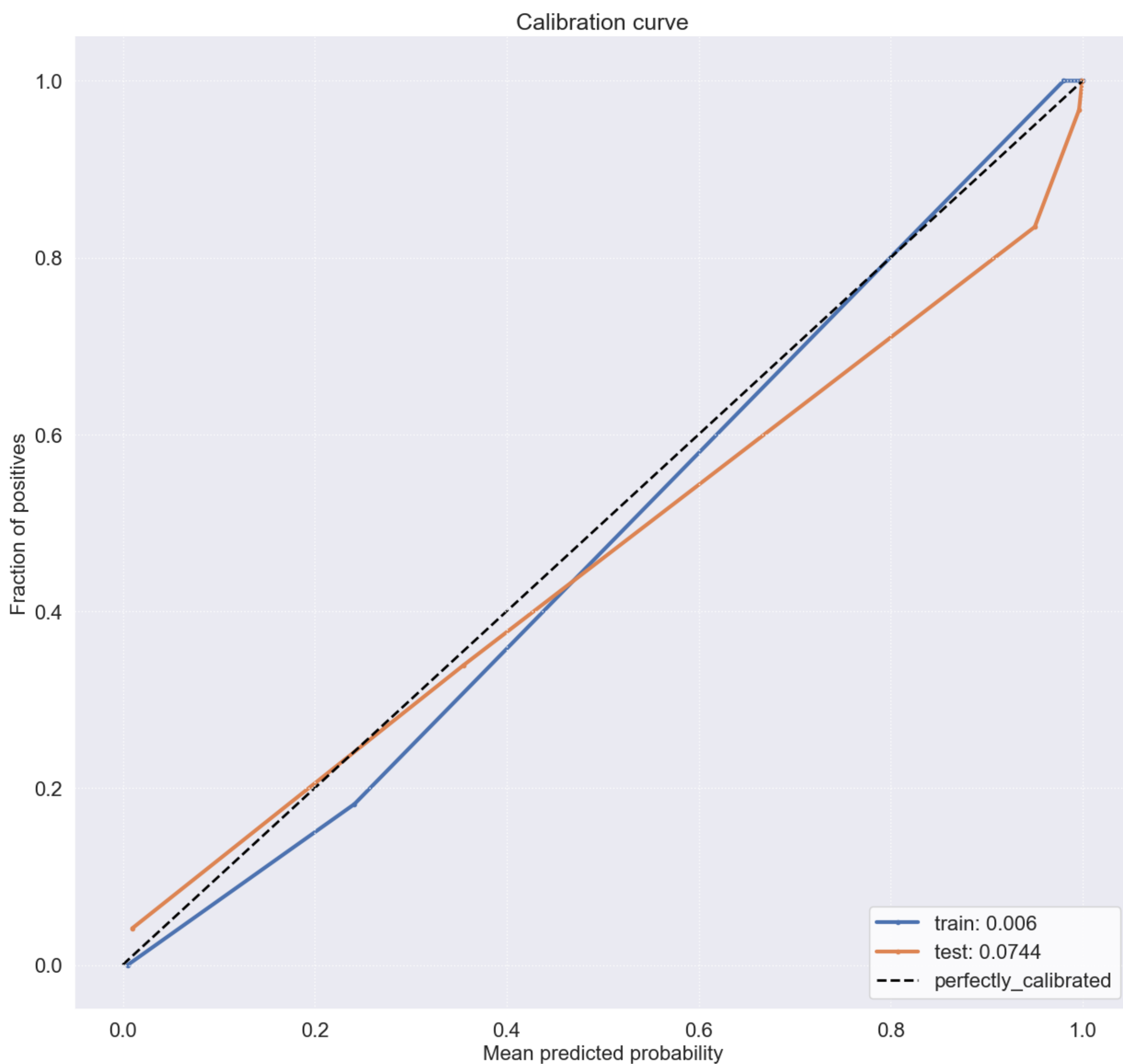
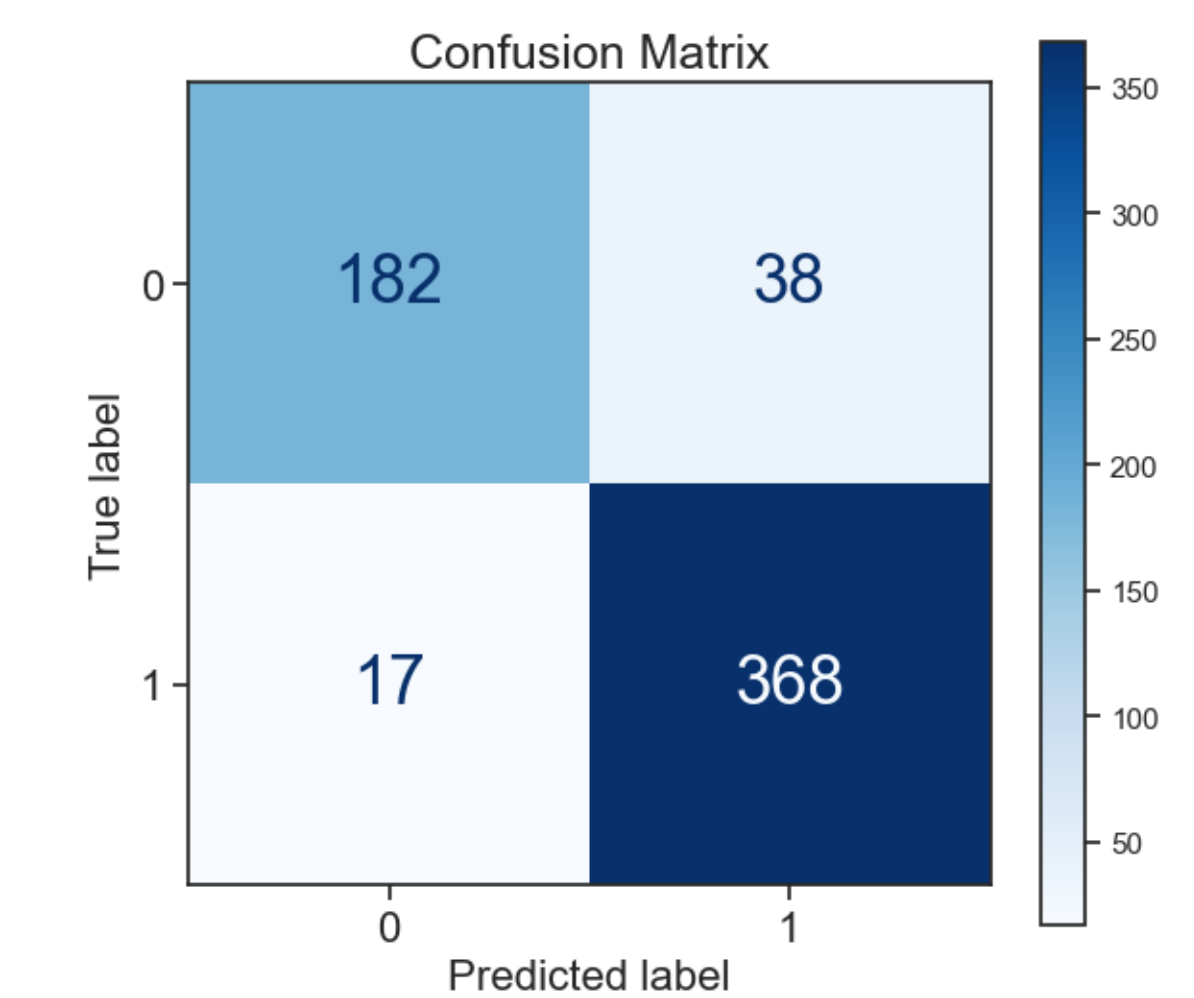


Metric	Train	Test
AUC	0.9992	0.958
accuracy	0.9905	0.9074
balanced accuracy	0.9894	0.8942
recall_(sens)	0.9935	0.9429
specificity	0.9852	0.8455
precision	0.9916	0.9144
f1_score	0.9905	0.9069

Protein: Q9Y5N1 - metric: f1

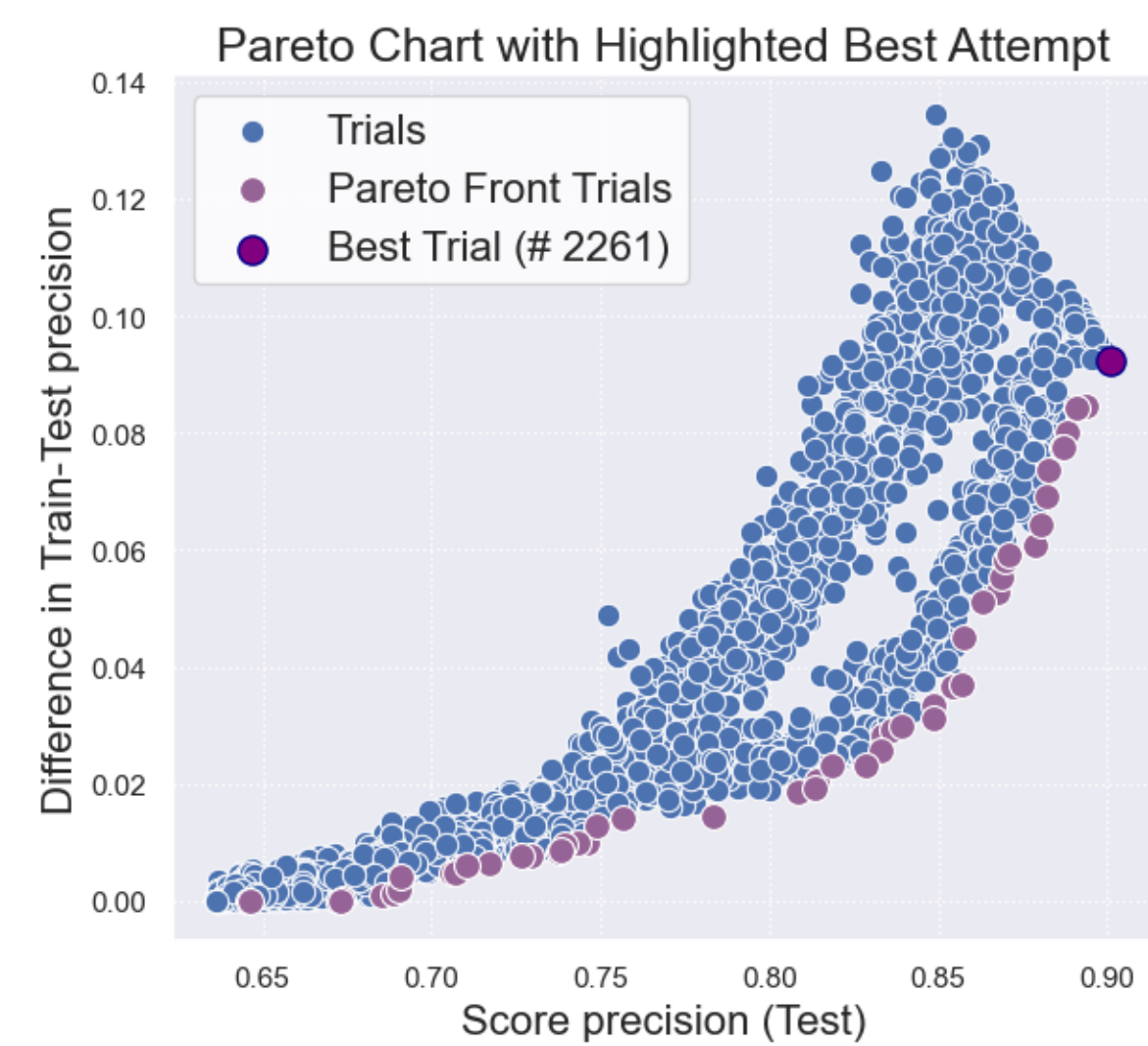
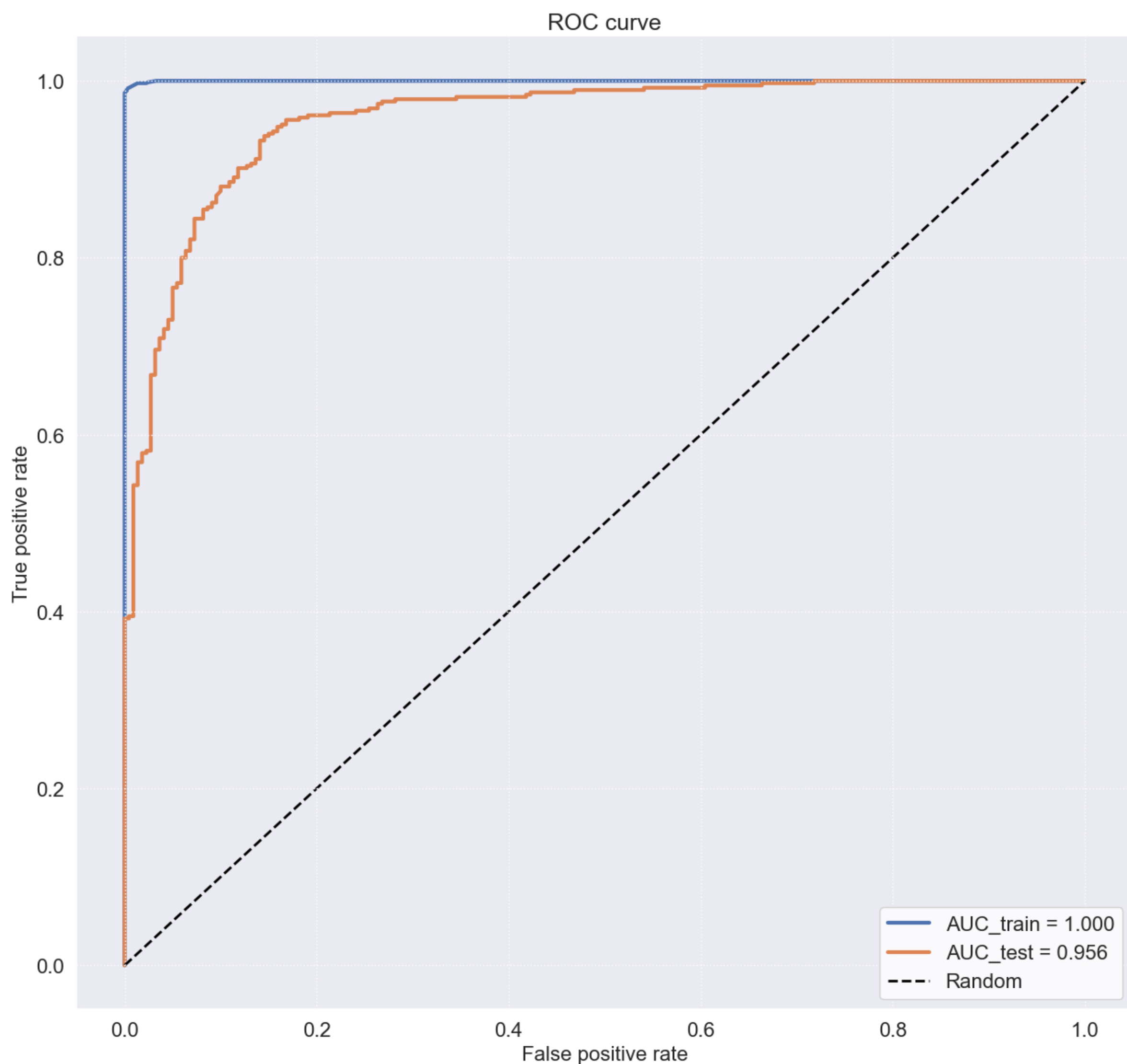
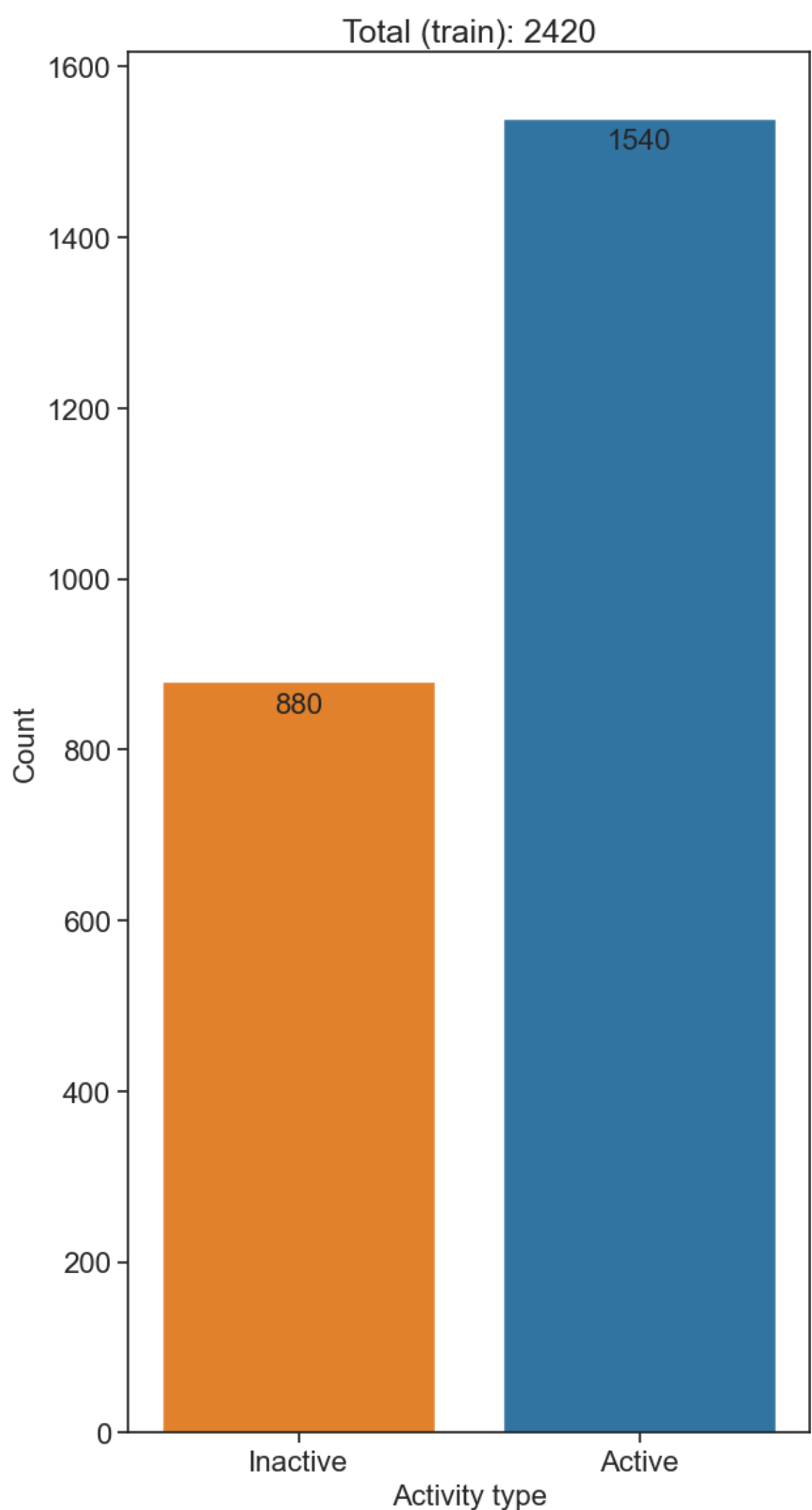


XGBoost Parameters	Value
alpha	4.0054
colsample_bytree	0.9797
gamma	0.0778
lambda	0.7014
learning_rate	0.0548
max_depth	9.0
min_child_weight	1.0
n_estimators	915.0
reg_alpha	0.0464
reg_lambda	0.607
scale_pos_weight	1.9013
subsample	0.7614

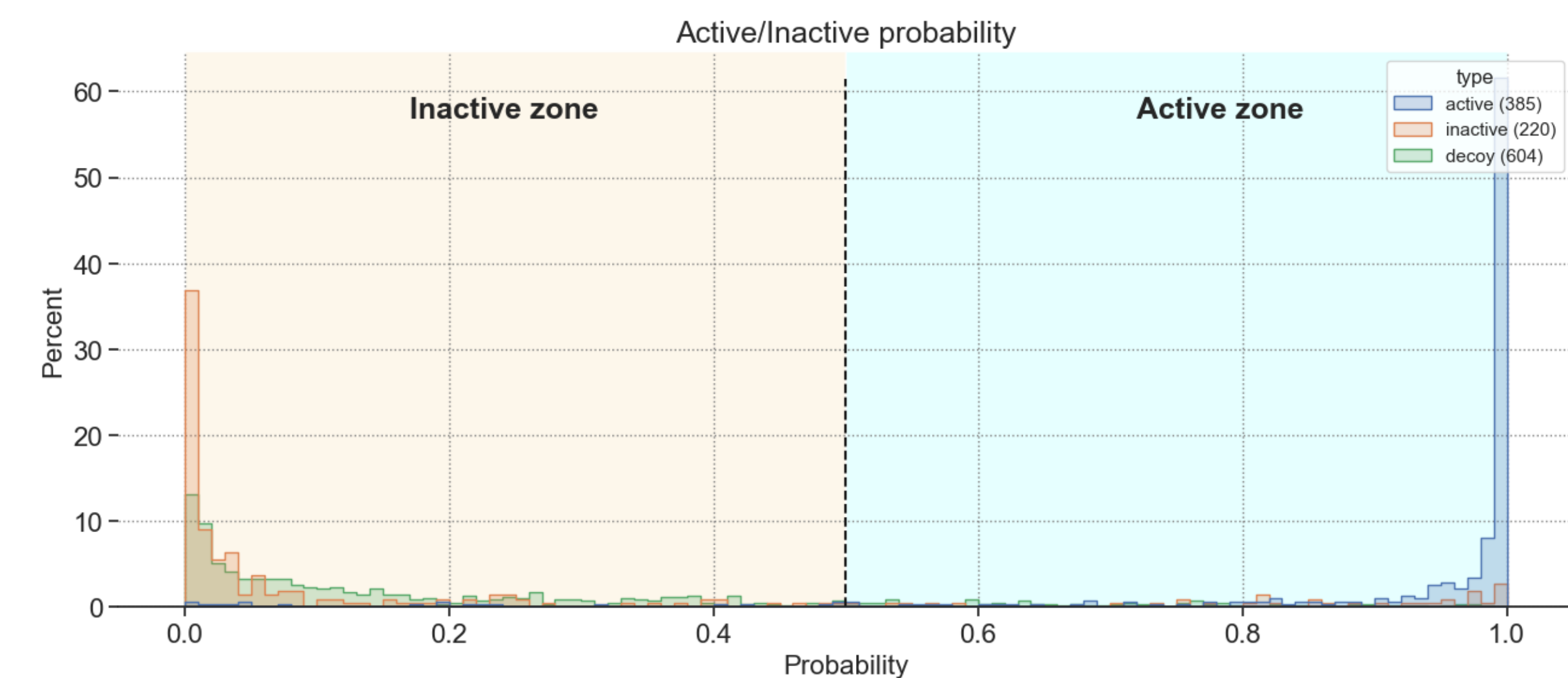
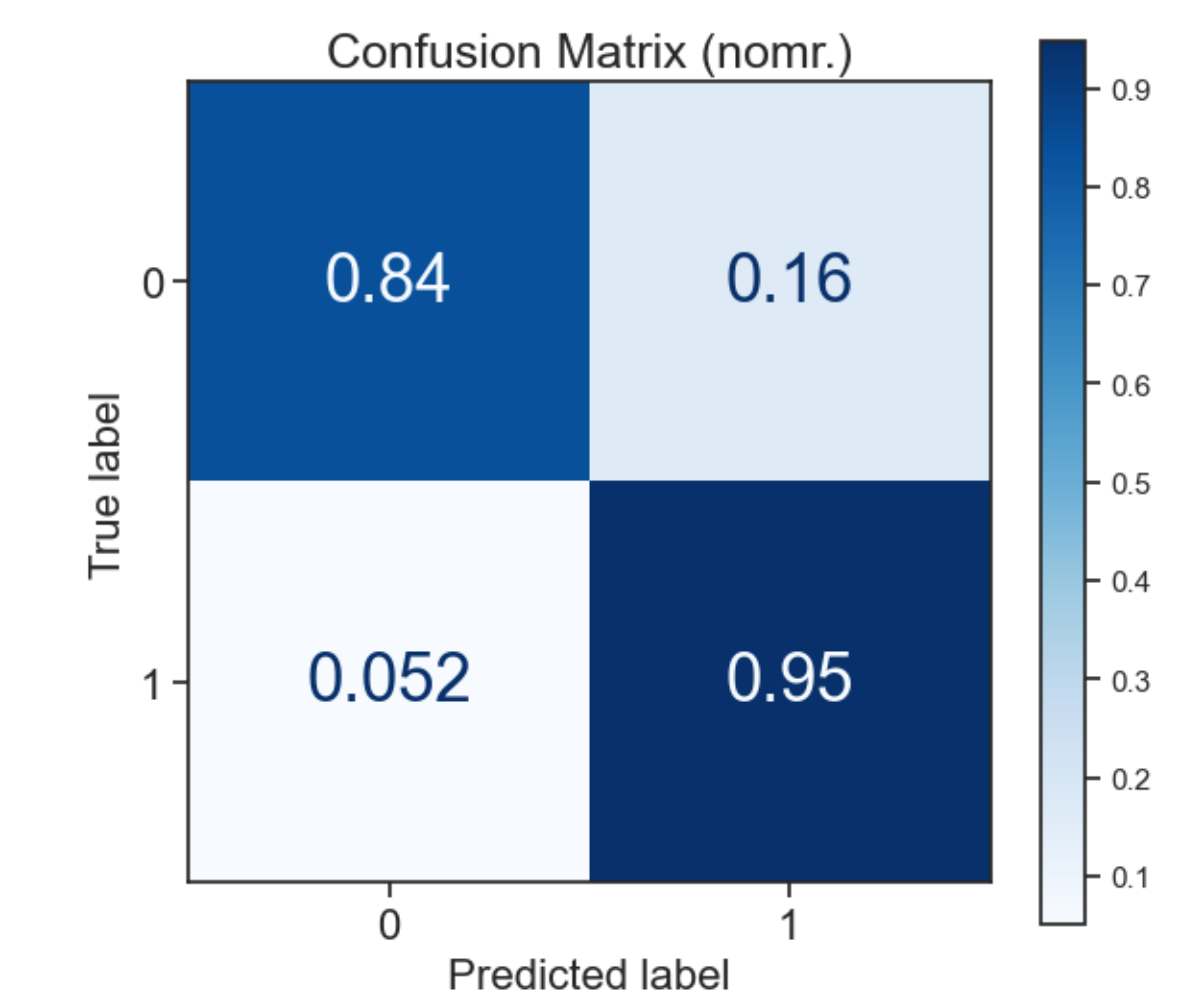
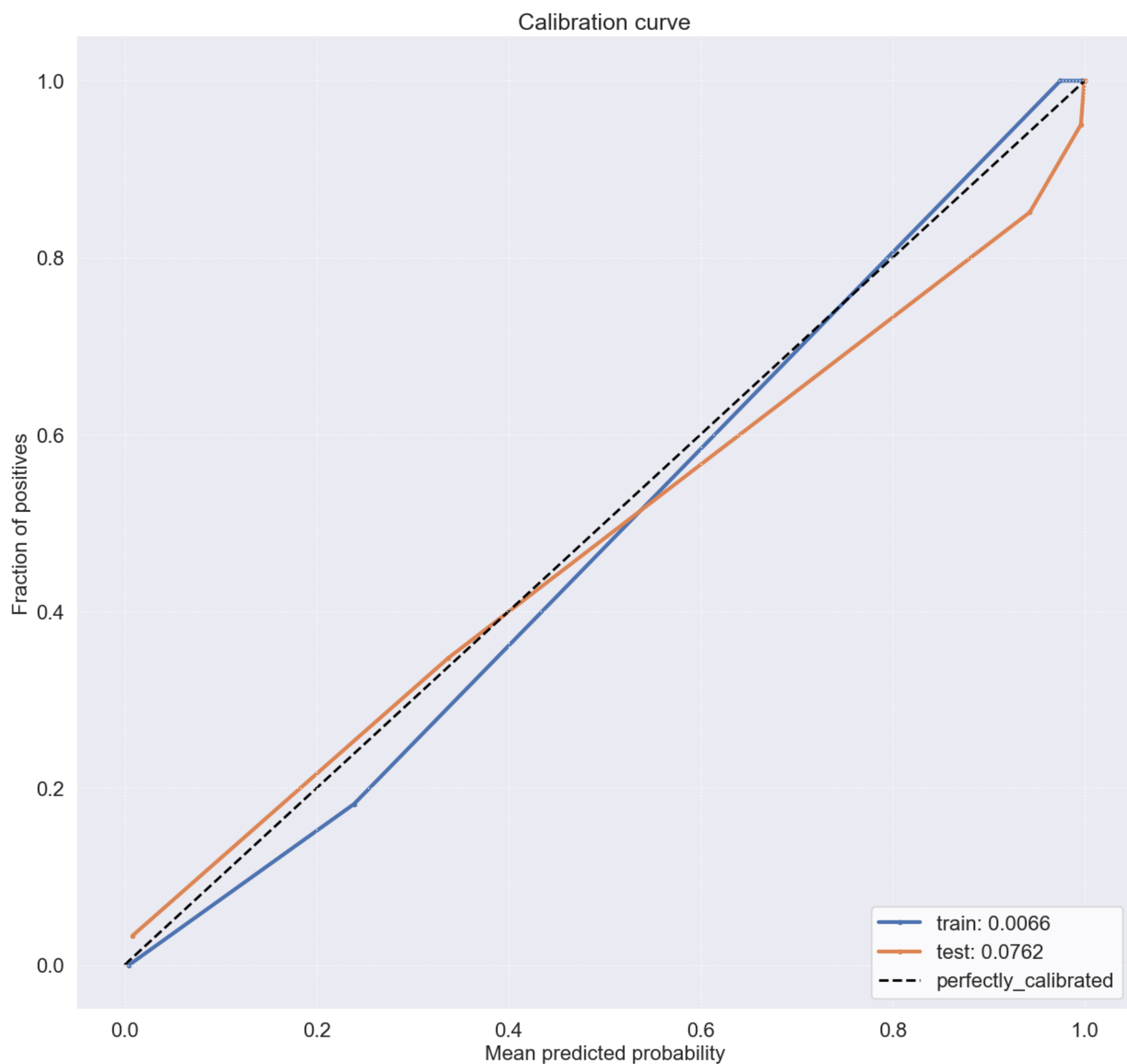
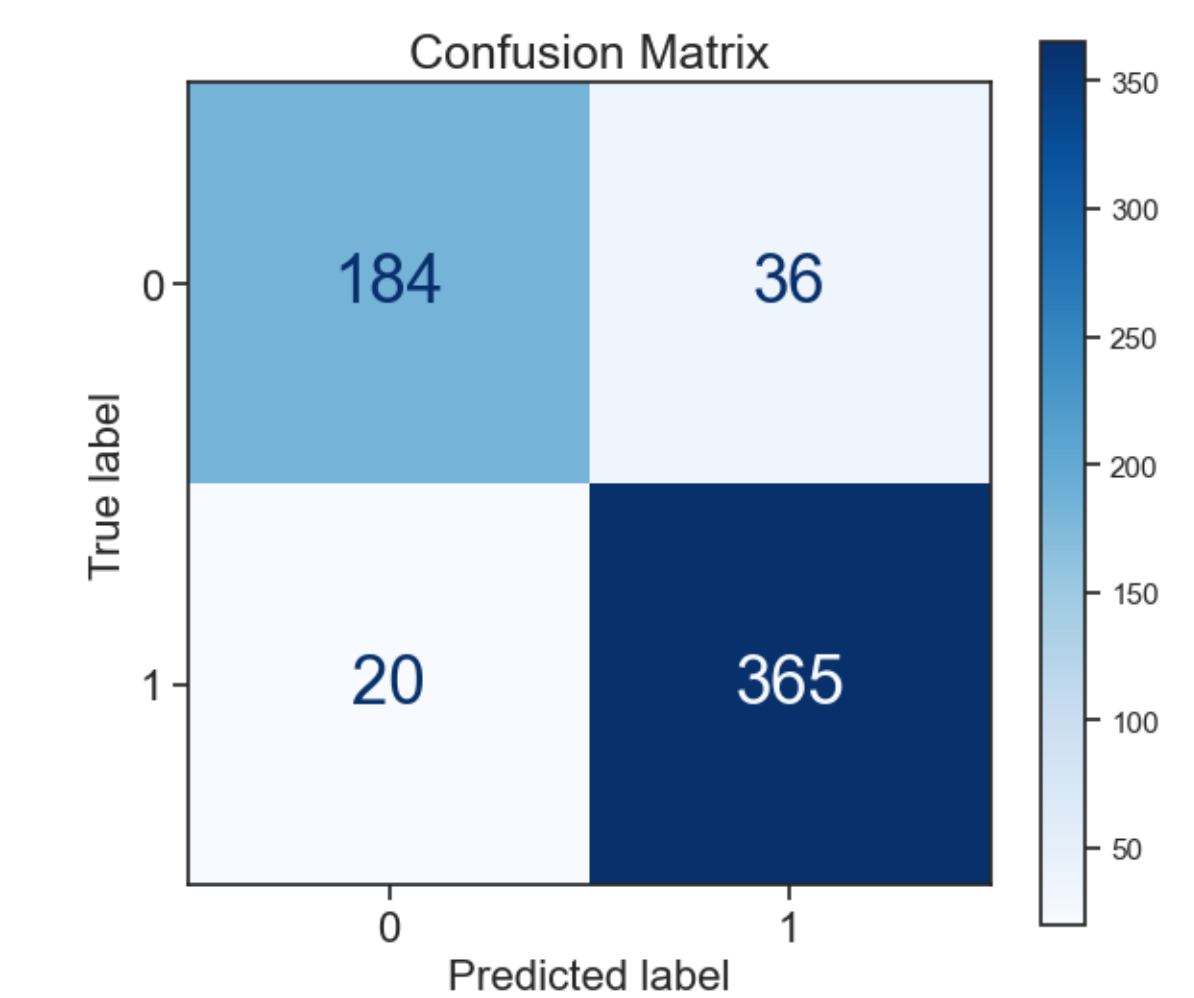


Metric	Train	Test
AUC	0.9999	0.9621
accuracy	0.9938	0.9091
balanced accuracy	0.9922	0.8916
recall_(sens)	0.9981	0.9558
specificity	0.9864	0.8273
precision	0.9923	0.9064
f1_score	0.9938	0.908

Protein: Q9Y5N1 - metric: precision

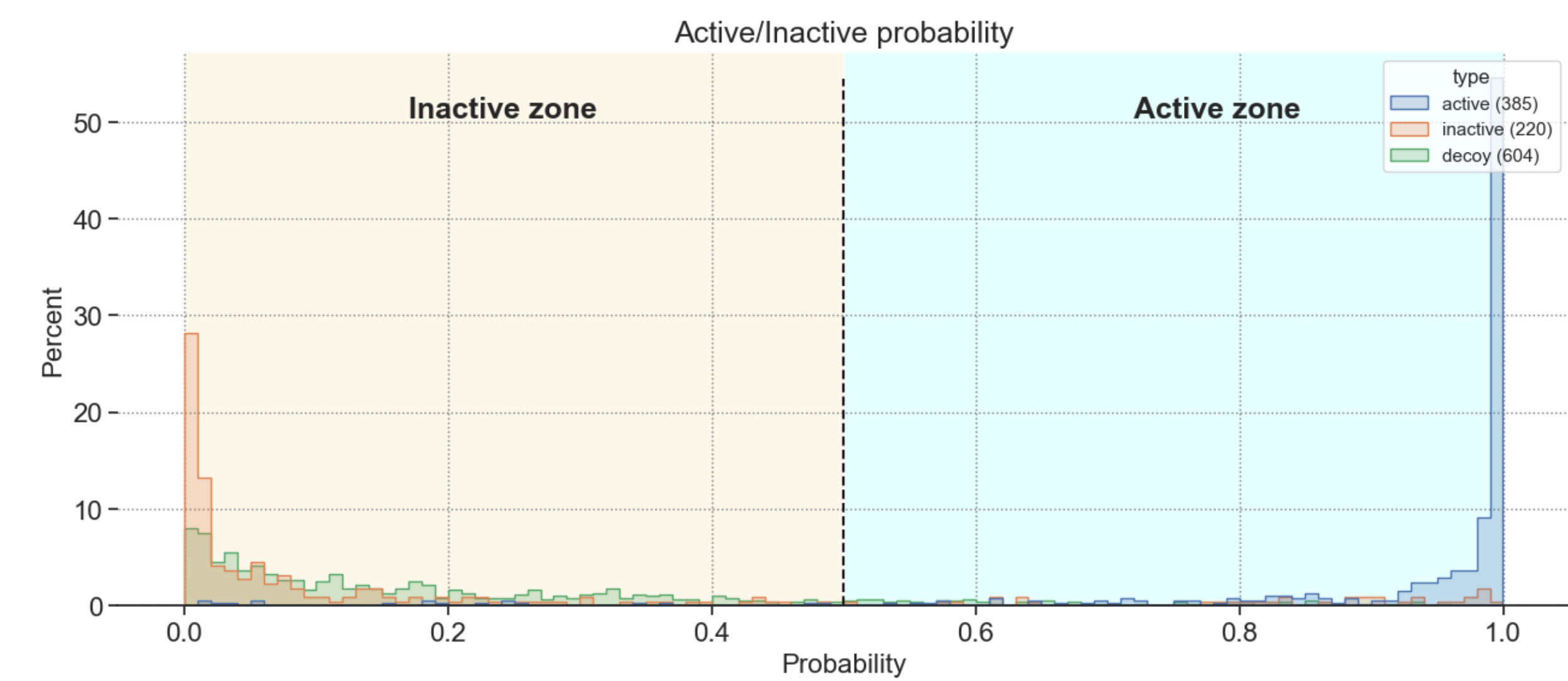
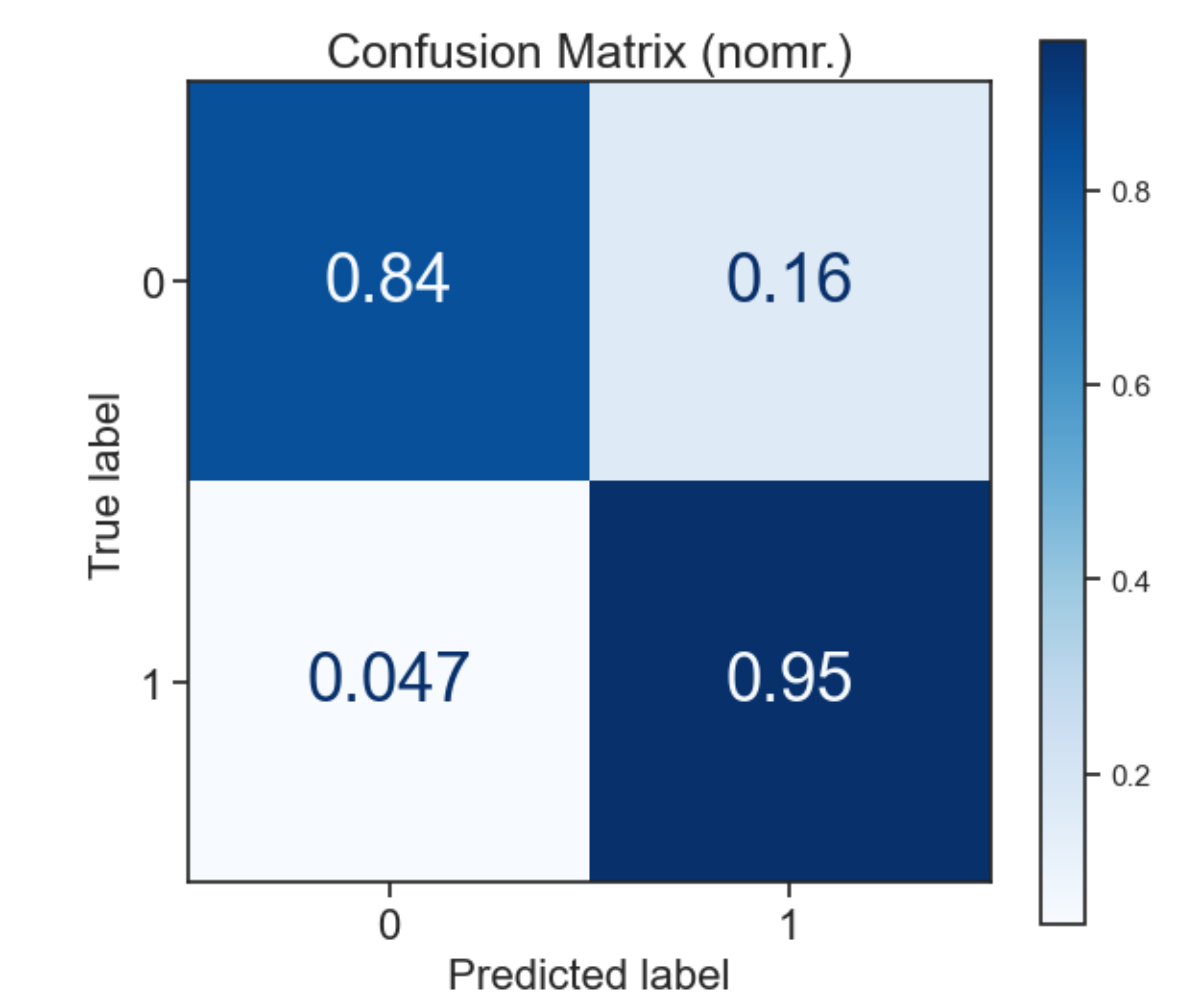
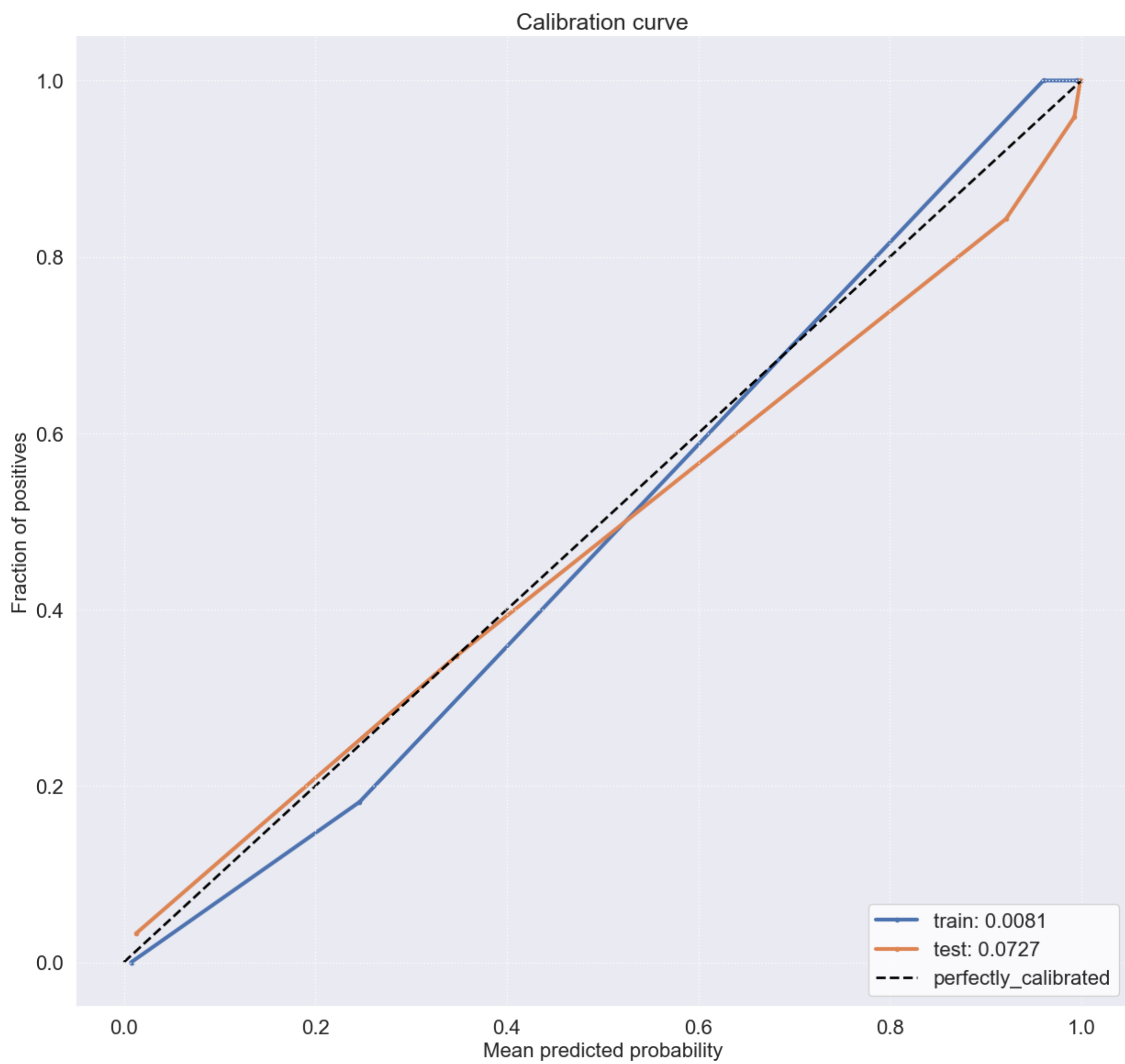
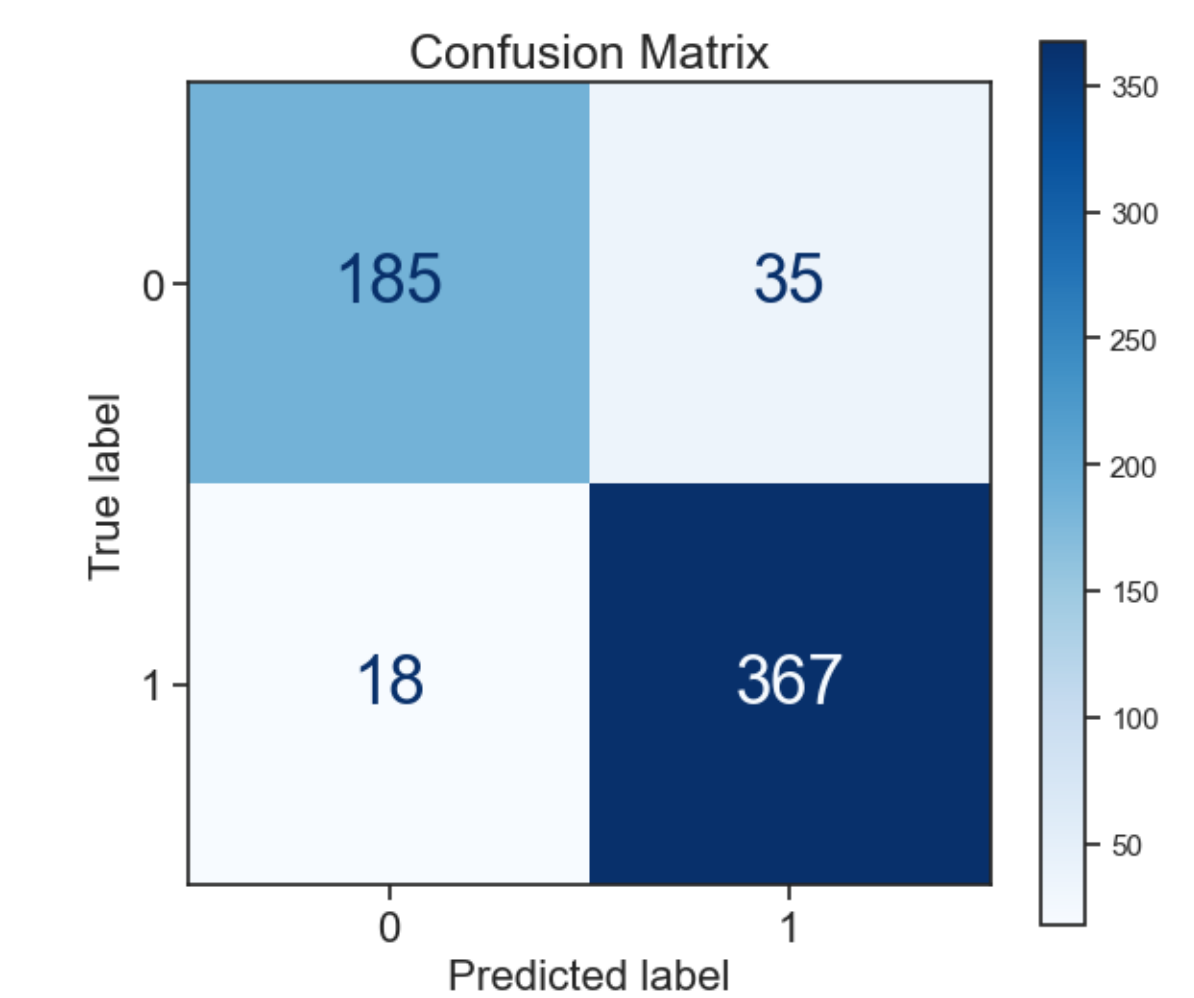
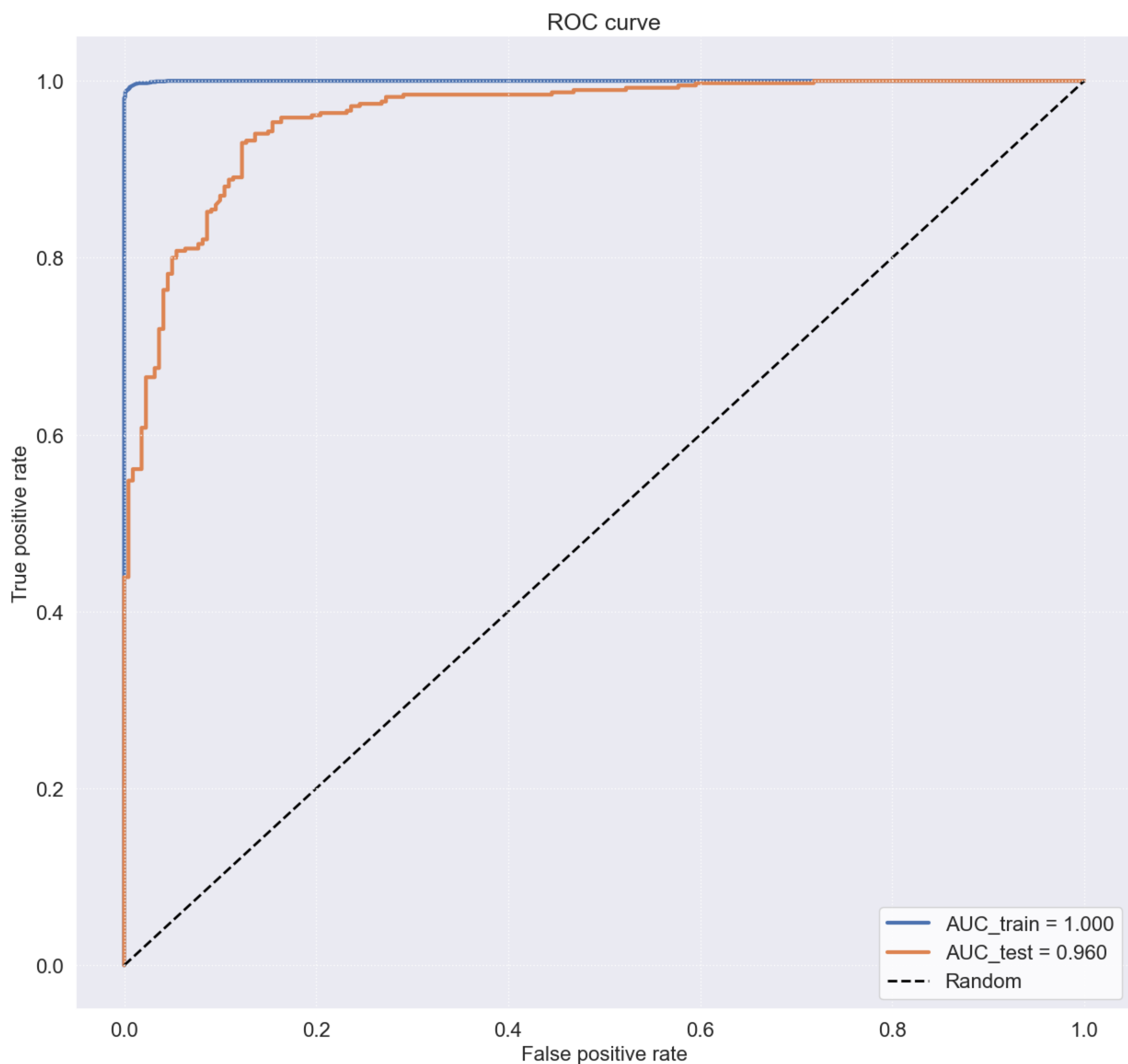
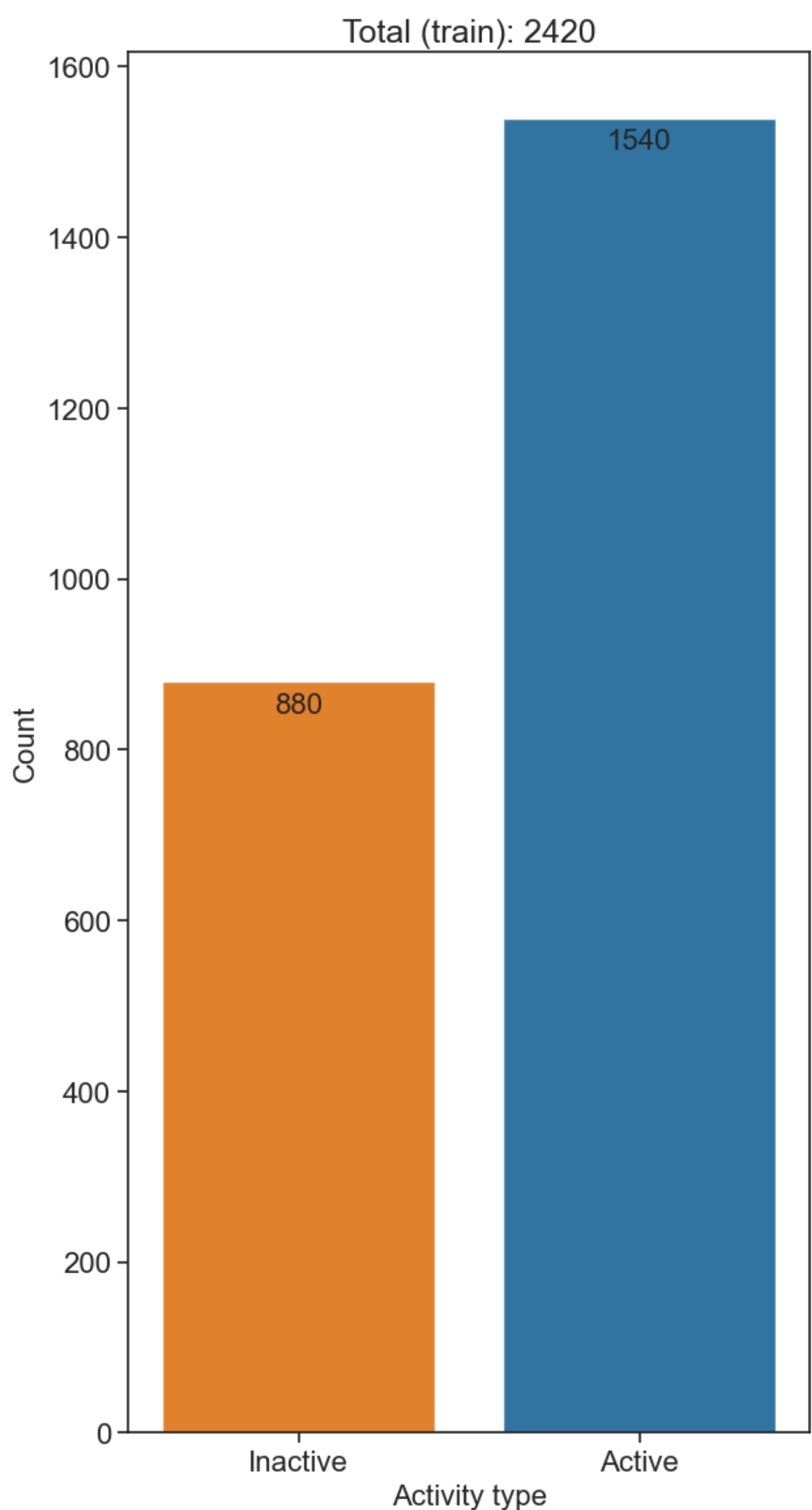


XGBoost Parameters	Value
alpha	2.2589
colsample_bytree	0.8763
gamma	0.0703
lambda	0.8106
learning_rate	0.1665
max_depth	10.0
min_child_weight	3.0
n_estimators	559.0
reg_alpha	0.2258
reg_lambda	0.2166
scale_pos_weight	1.5554
subsample	0.9108



Metric	Train	Test
AUC	0.9999	0.9564
accuracy	0.993	0.9074
balanced accuracy	0.9913	0.8922
recall_(sens)	0.9974	0.9481
specificity	0.9852	0.8364
precision	0.9916	0.9102
f1_score	0.993	0.9066

Protein: Q9Y5N1 - metric: SoftVotingXGBoostEnsemble



Metric	Train	Test
AUC	0.9998	0.9596
accuracy	0.993	0.9124
balanced accuracy	0.9913	0.8971
recall_(sens)	0.9974	0.9532
specificity	0.9852	0.8409
precision	0.9916	0.9129
f1_score	0.993	0.9116