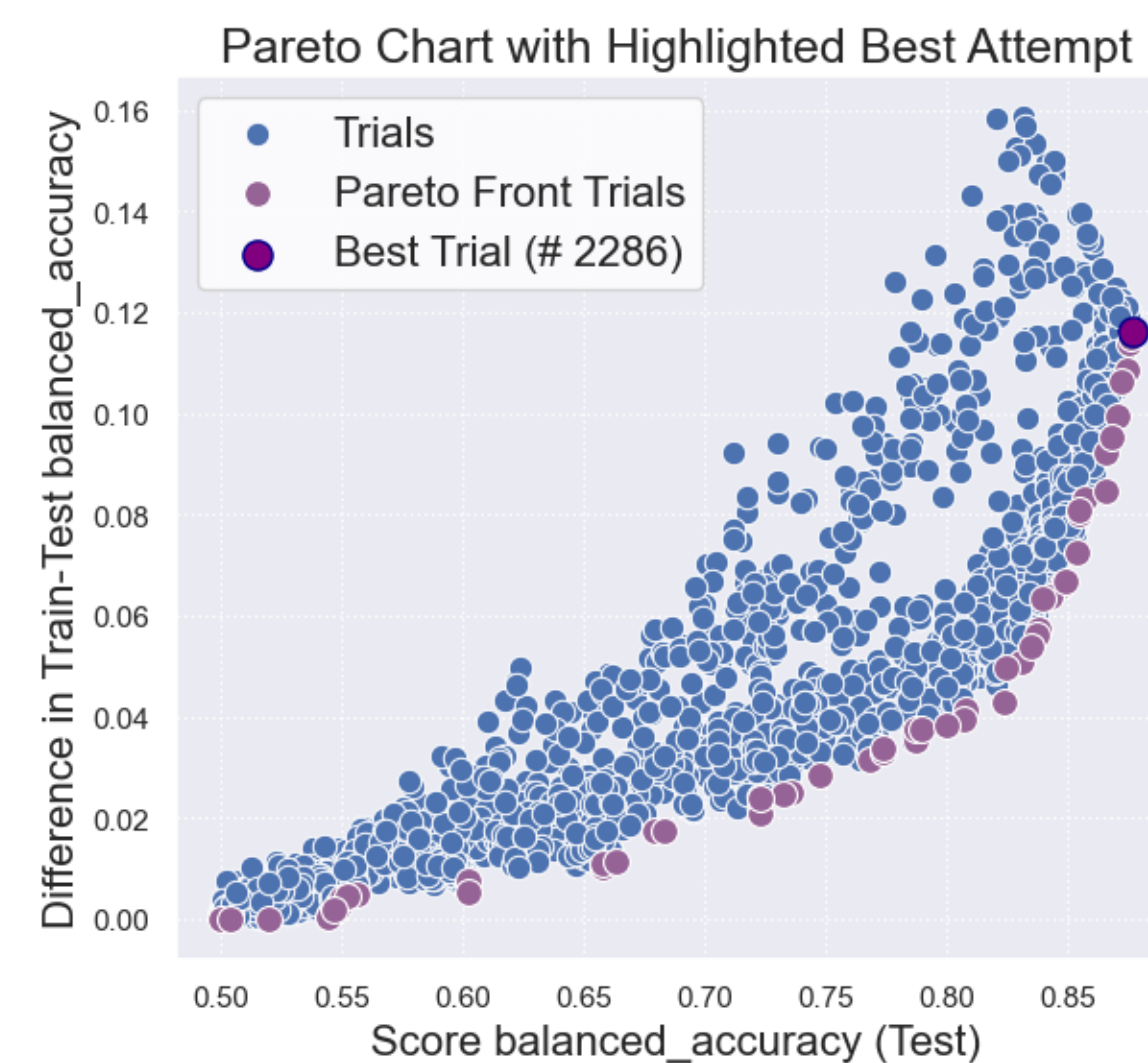
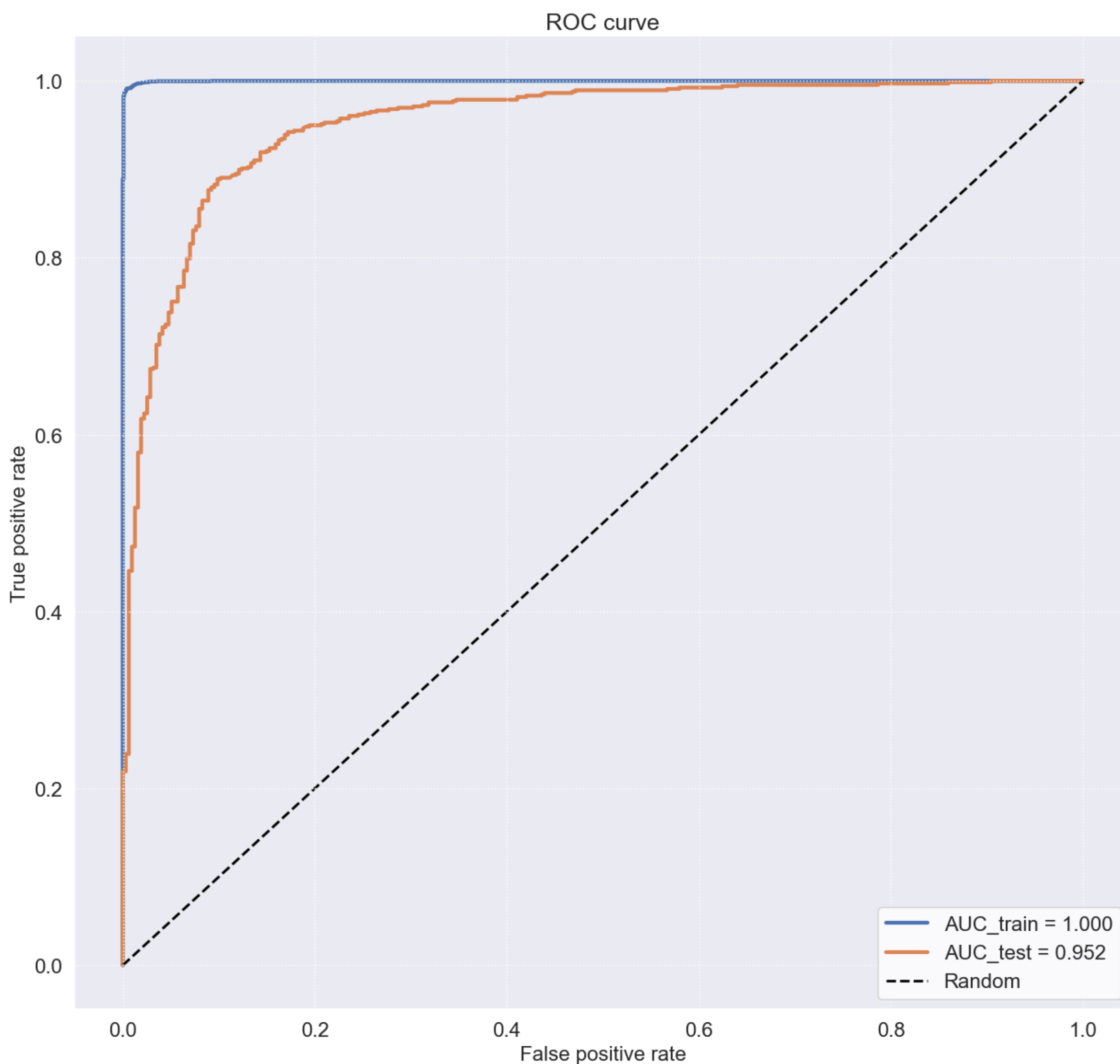
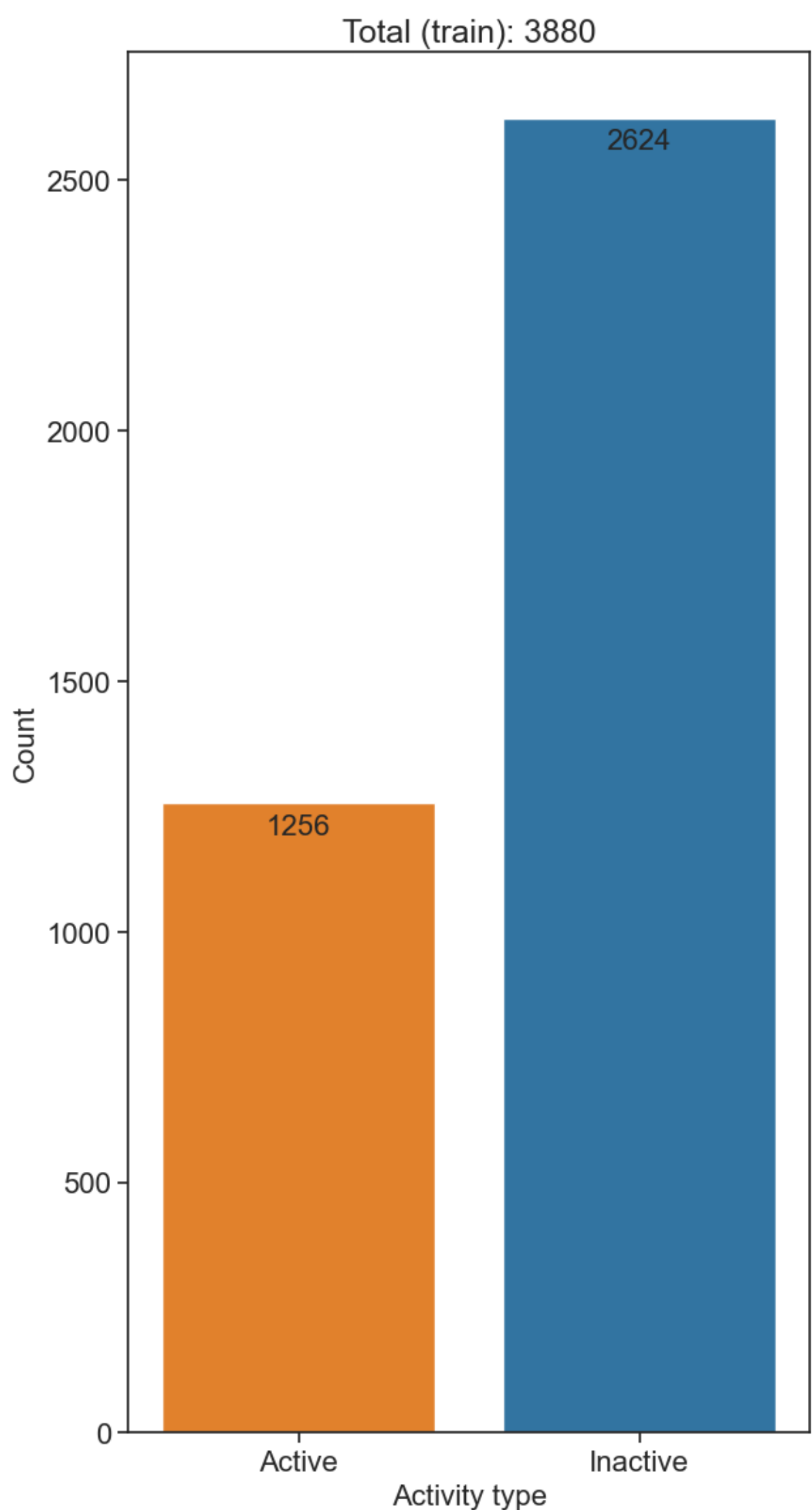
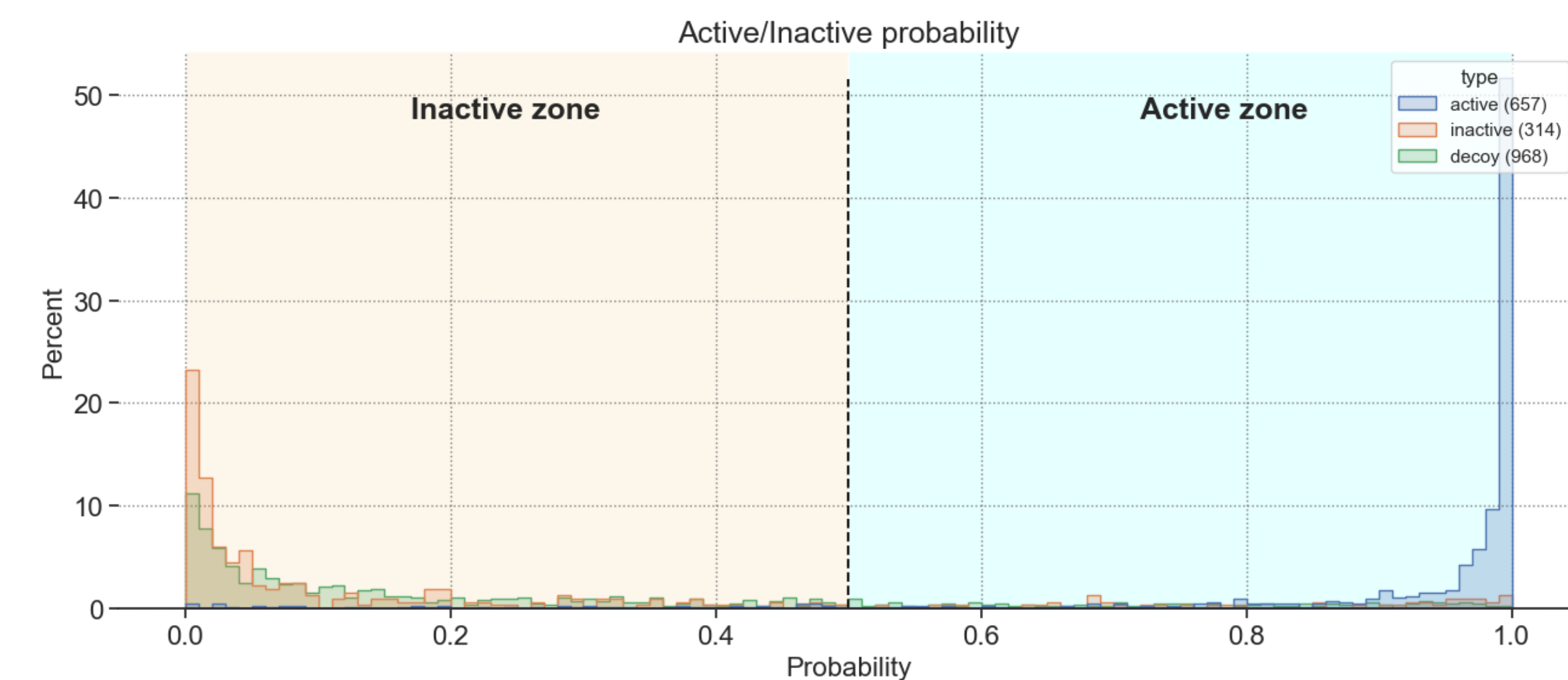
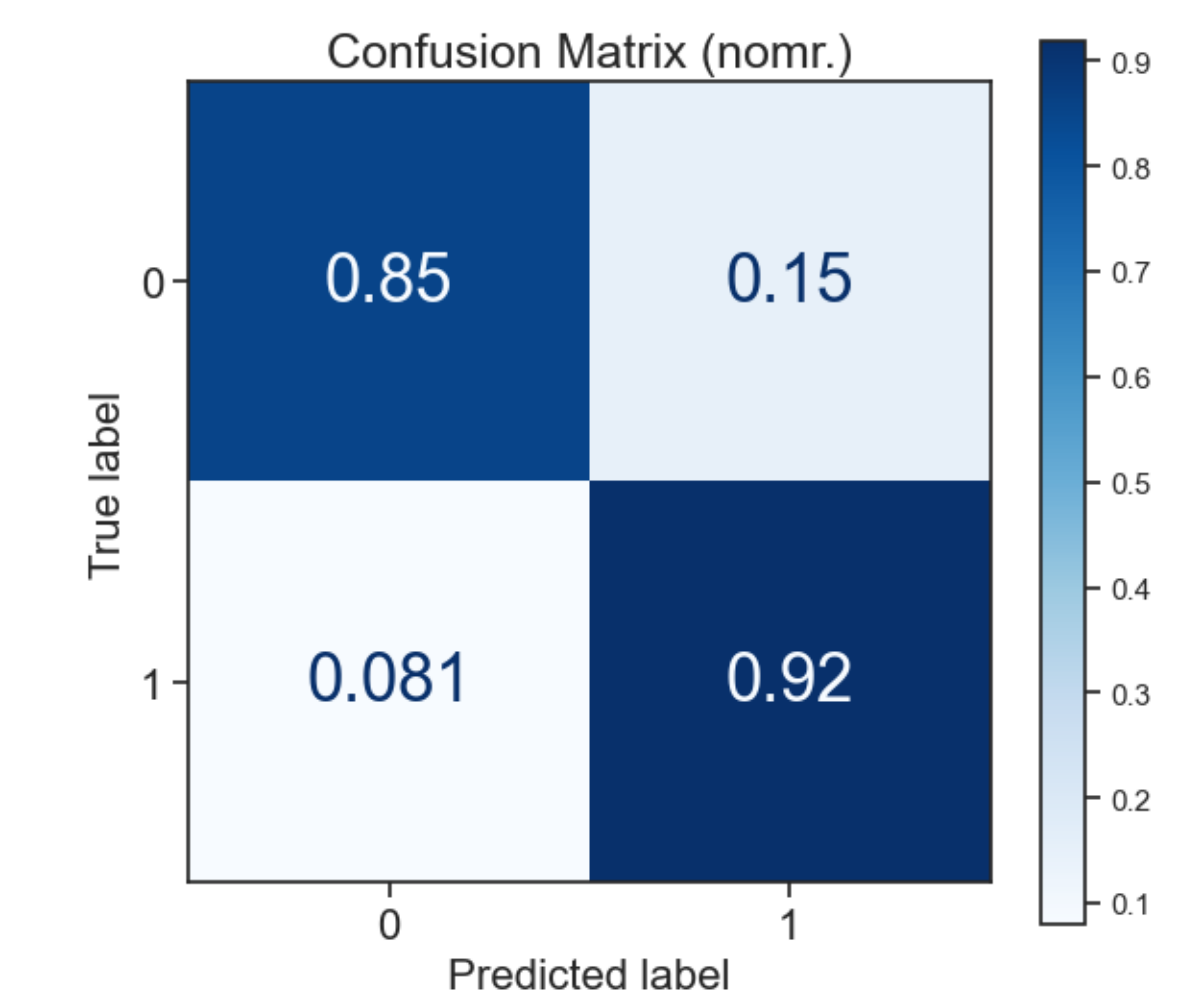
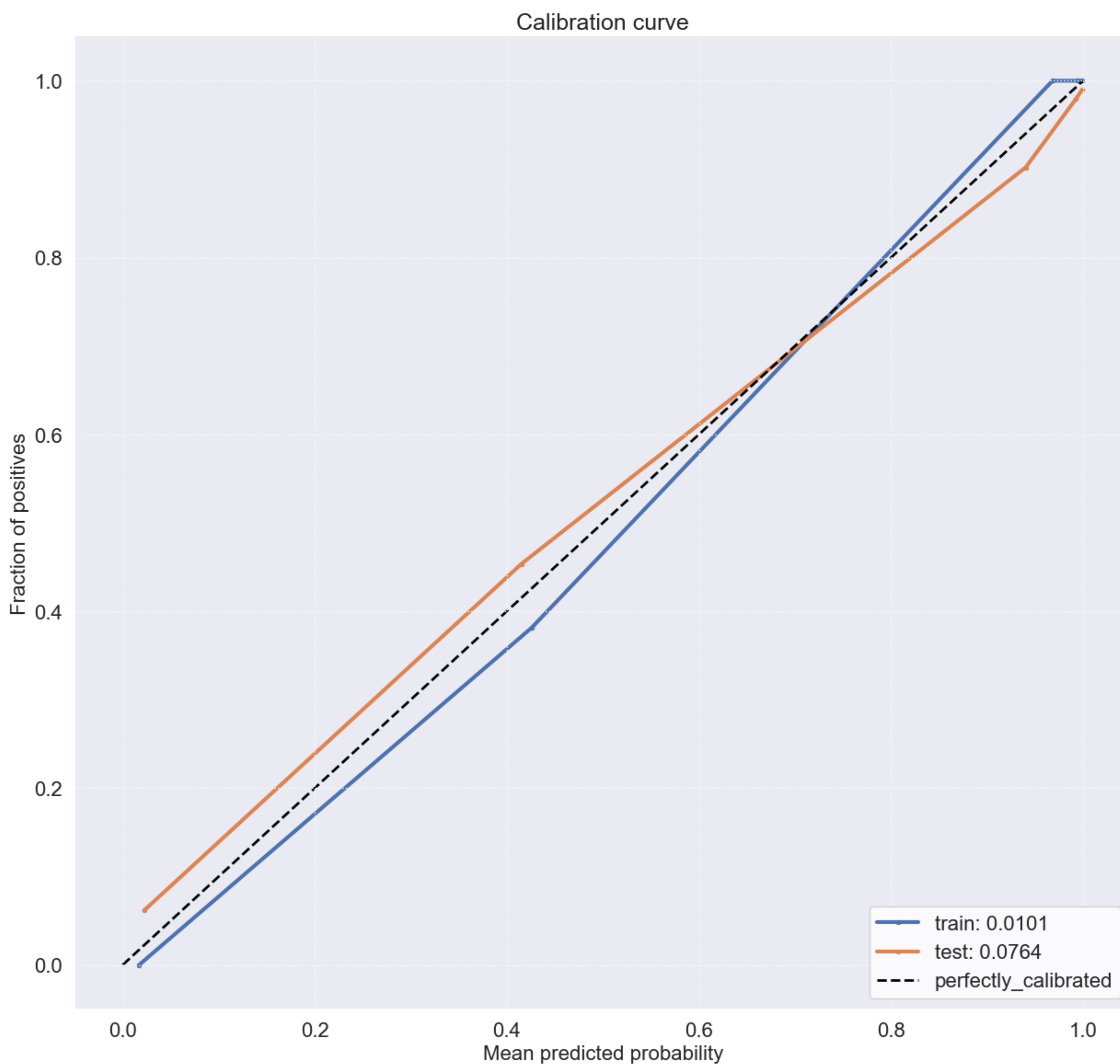
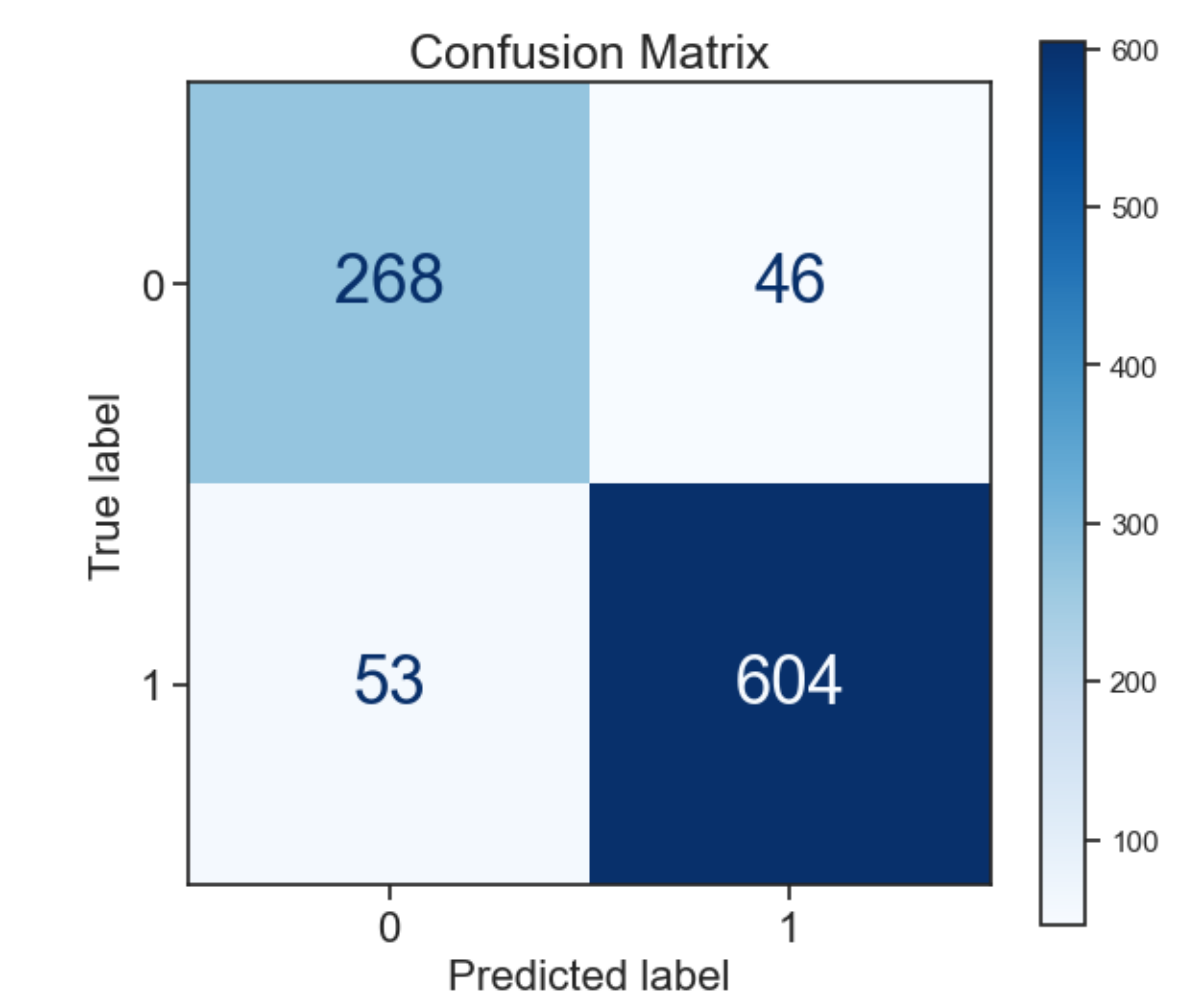


Protein: P14416 - metric: balanced_accuracy

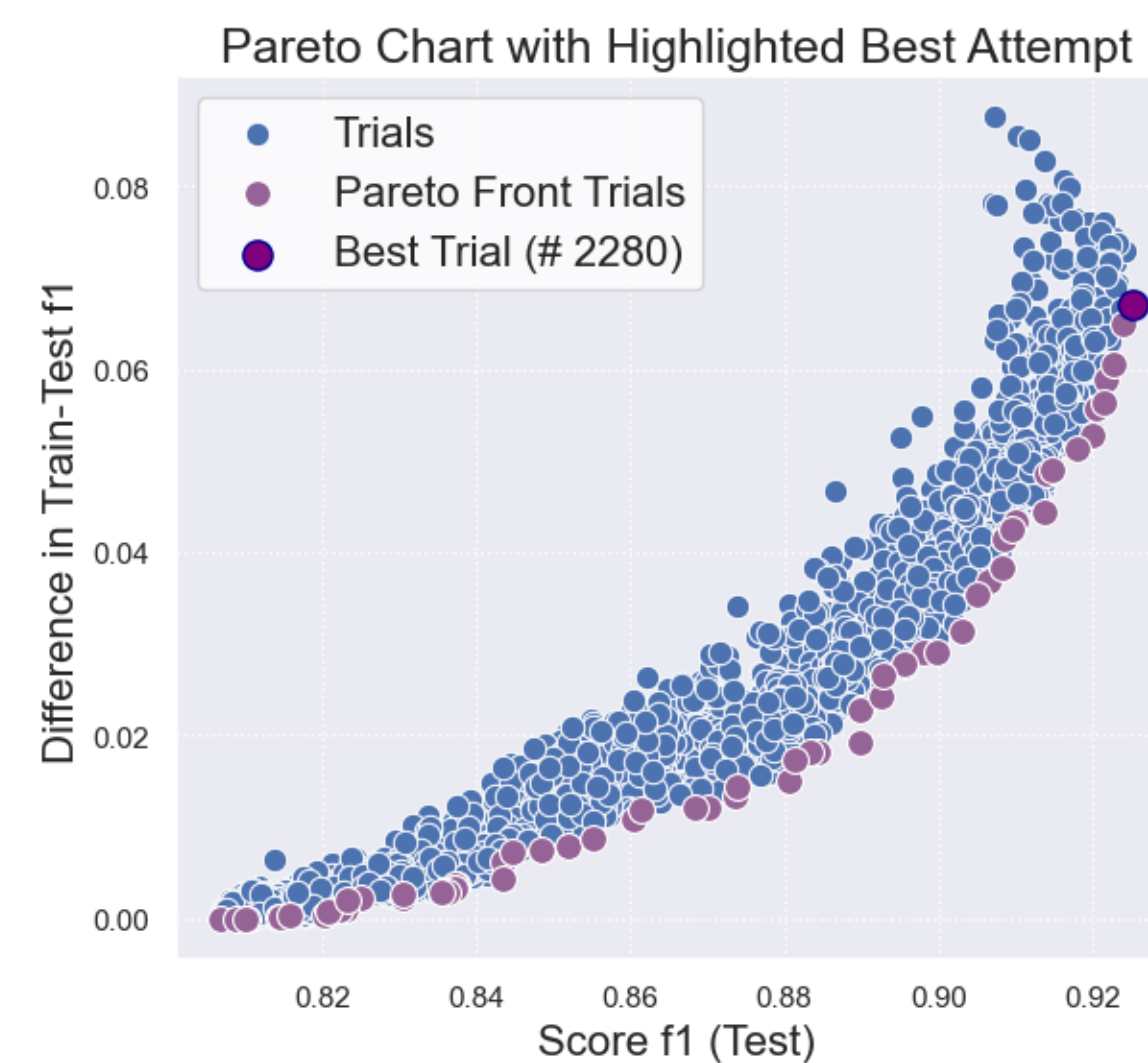
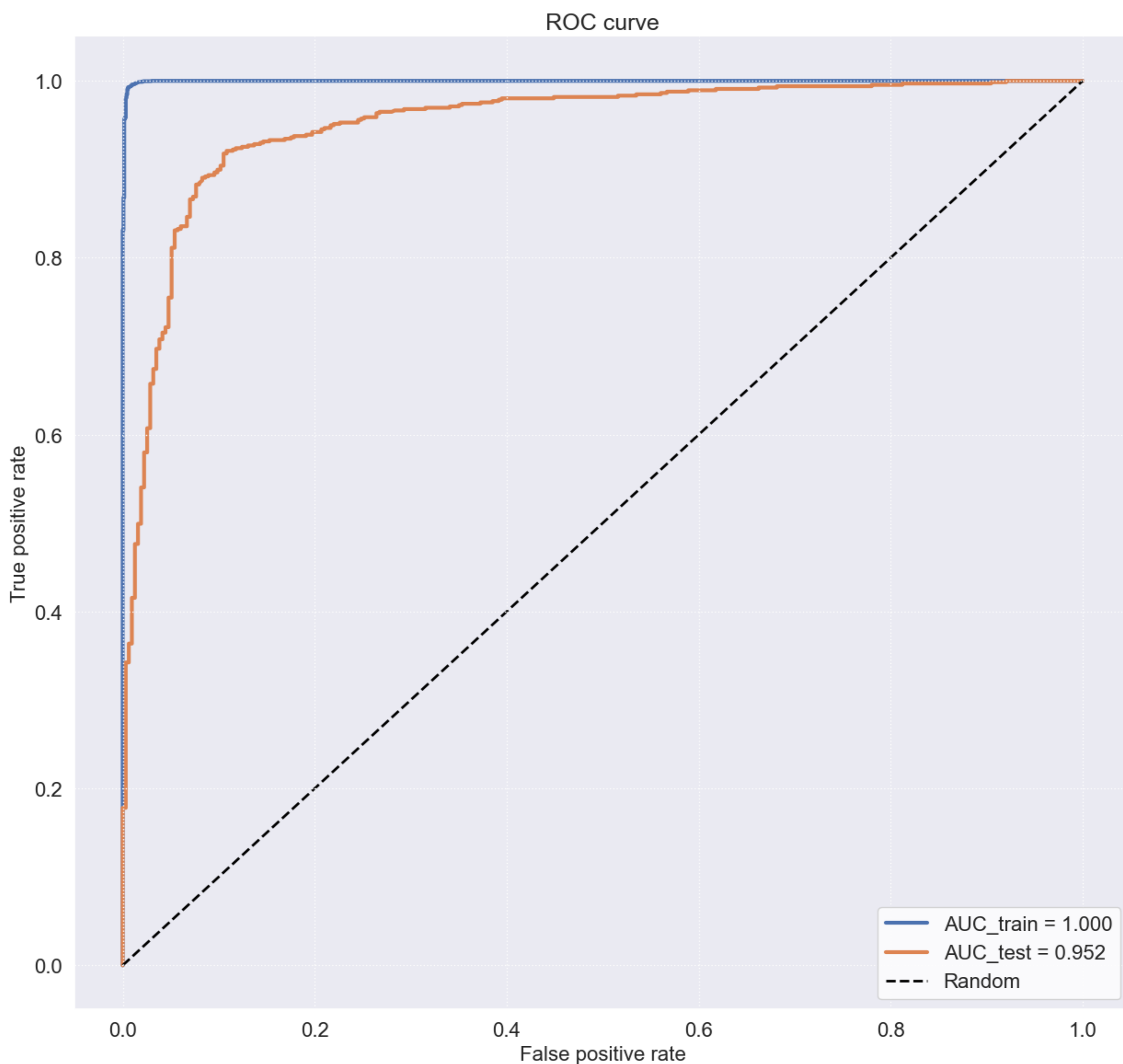
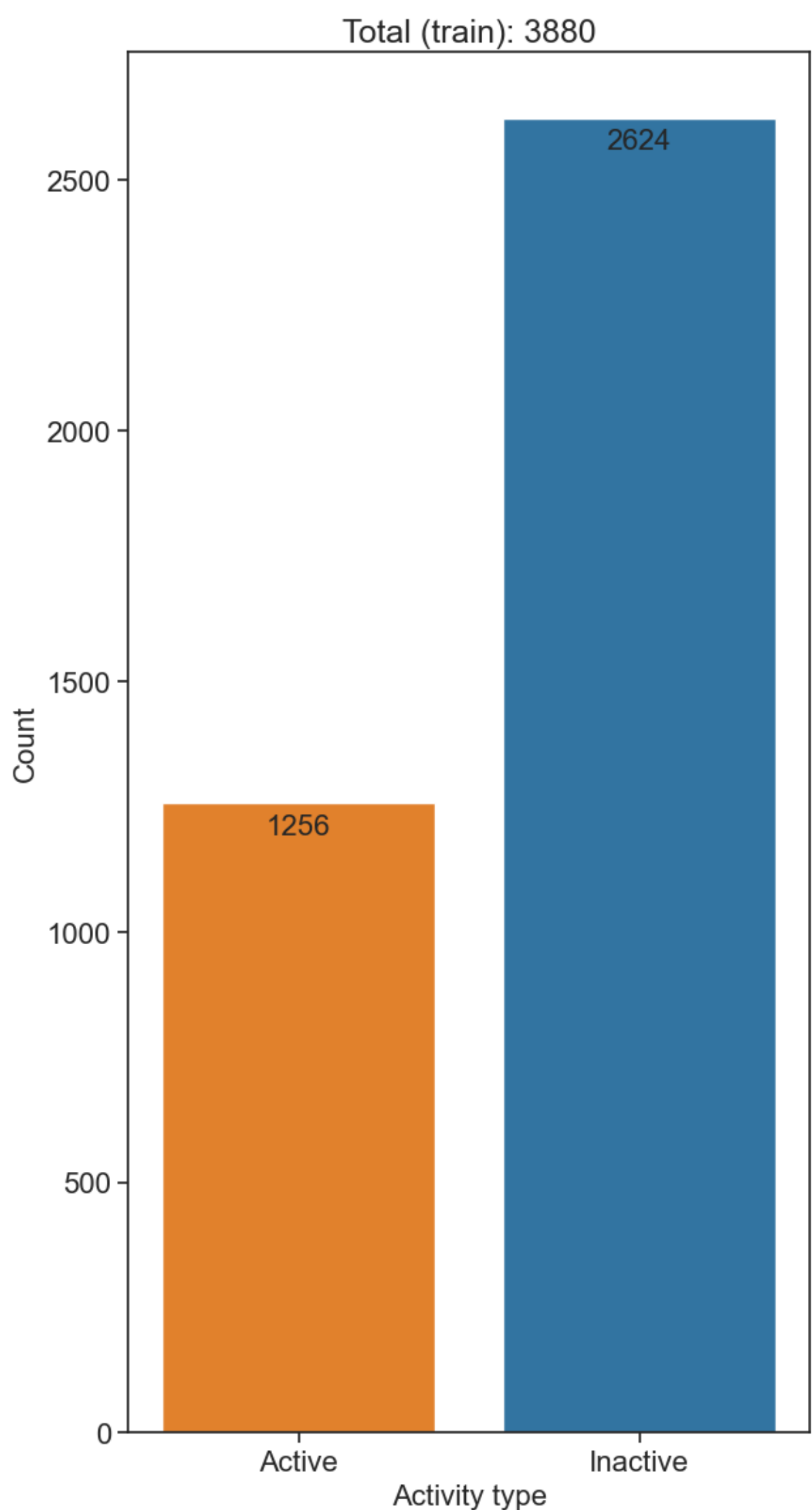


XGBoost Parameters	Value
alpha	4.7966
colsample_bytree	0.5387
gamma	0.1068
lambda	2.1589
learning_rate	0.1118
max_depth	5.0
min_child_weight	1.0
n_estimators	917.0
reg_alpha	0.1172
reg_lambda	0.6887
scale_pos_weight	1.2314
subsample	0.7559

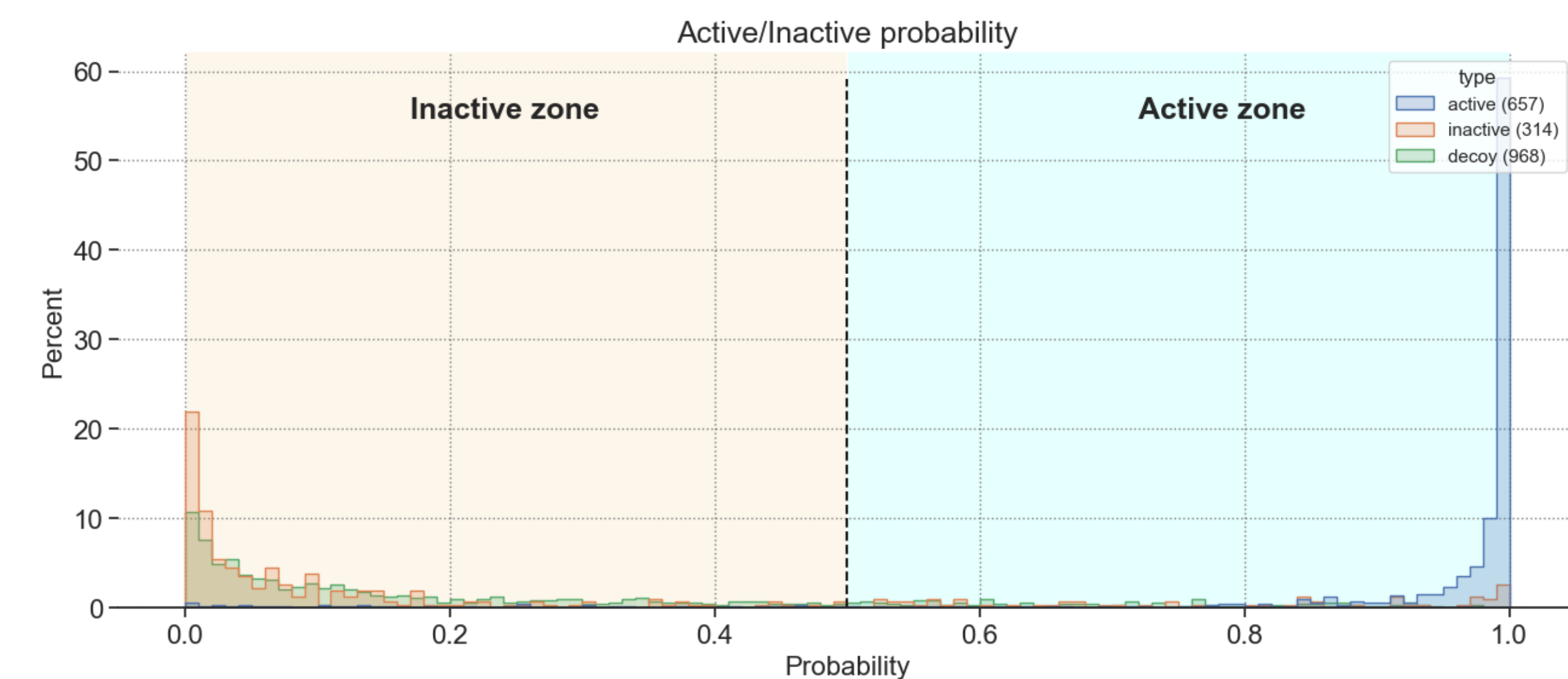
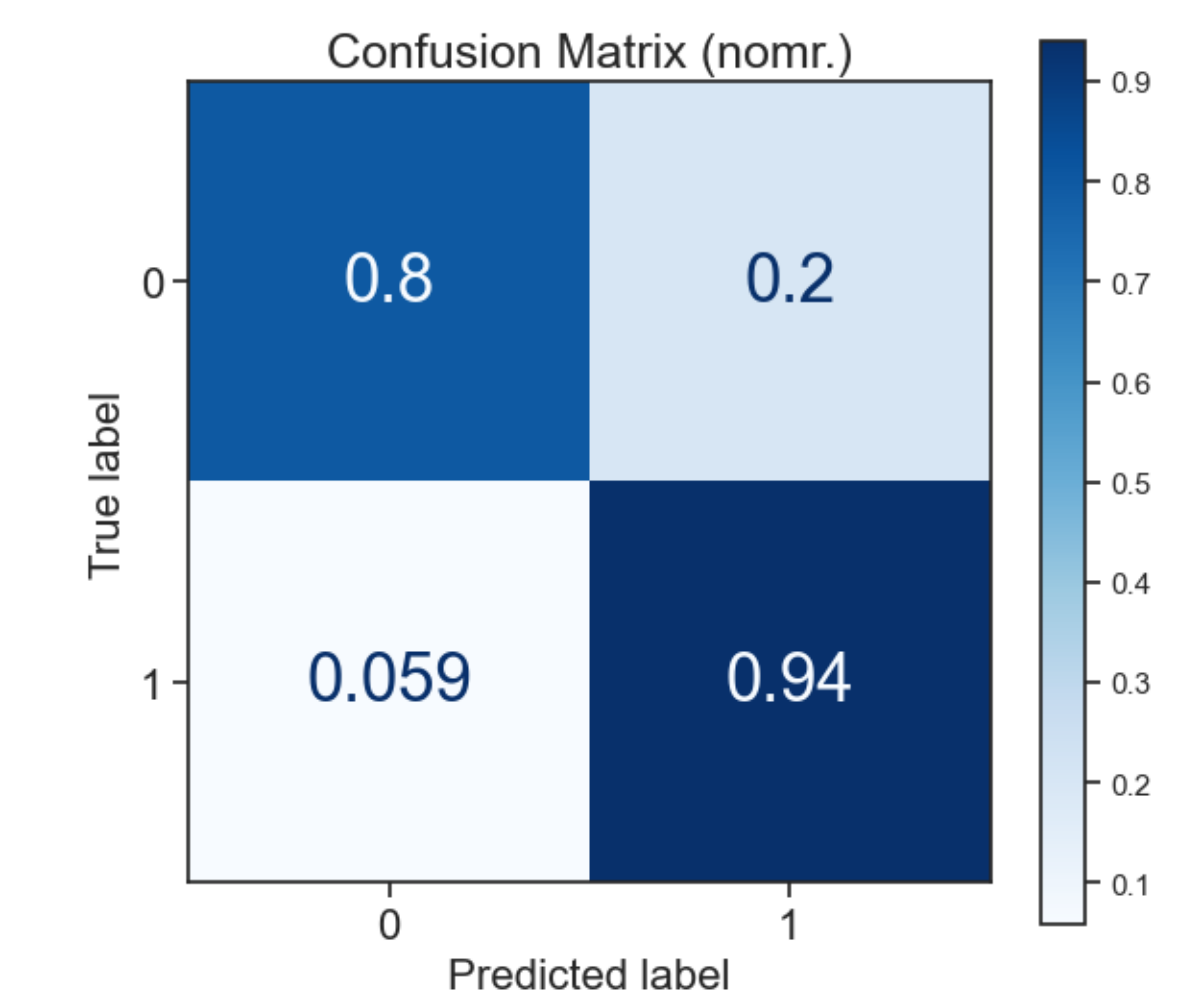
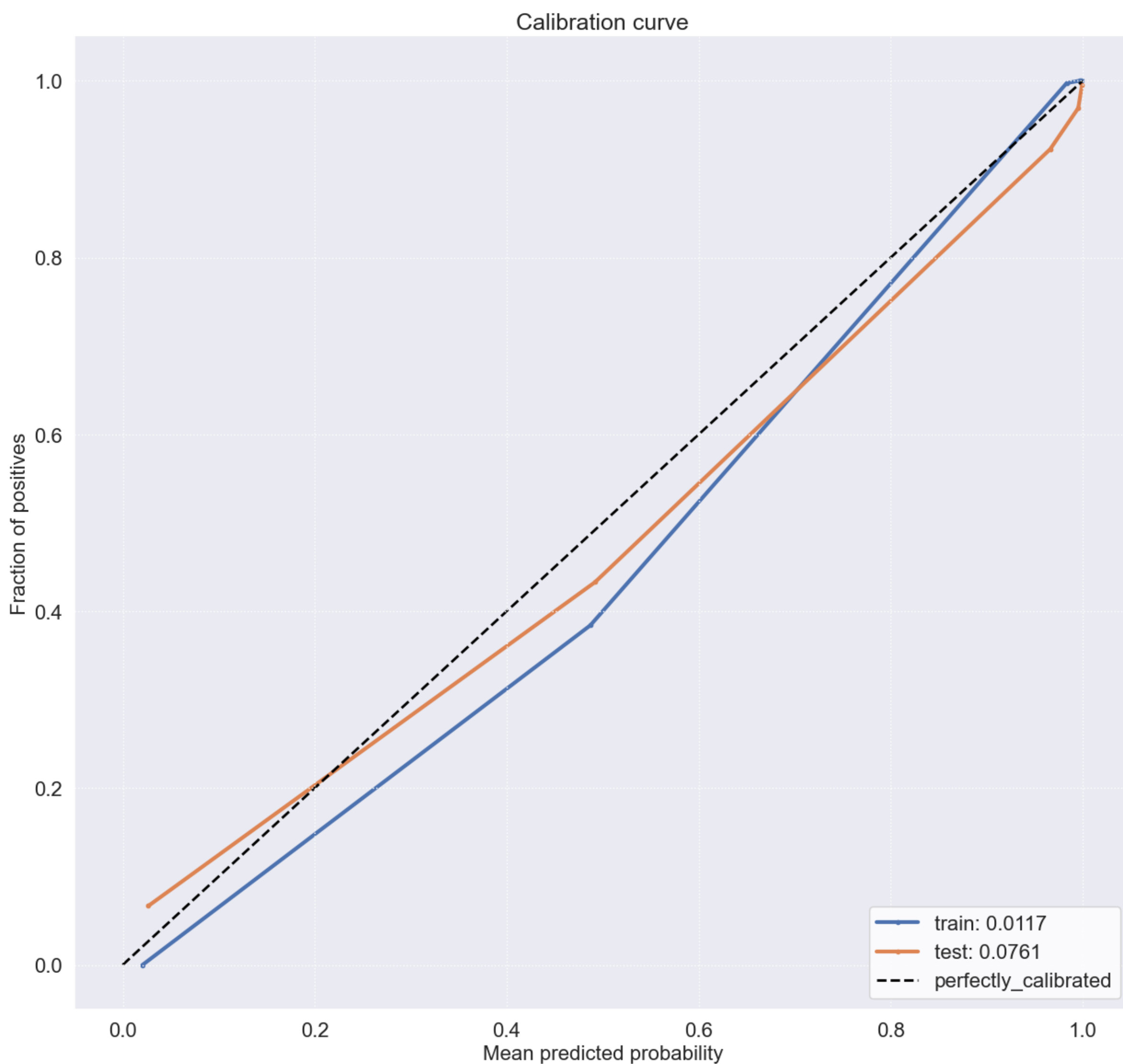
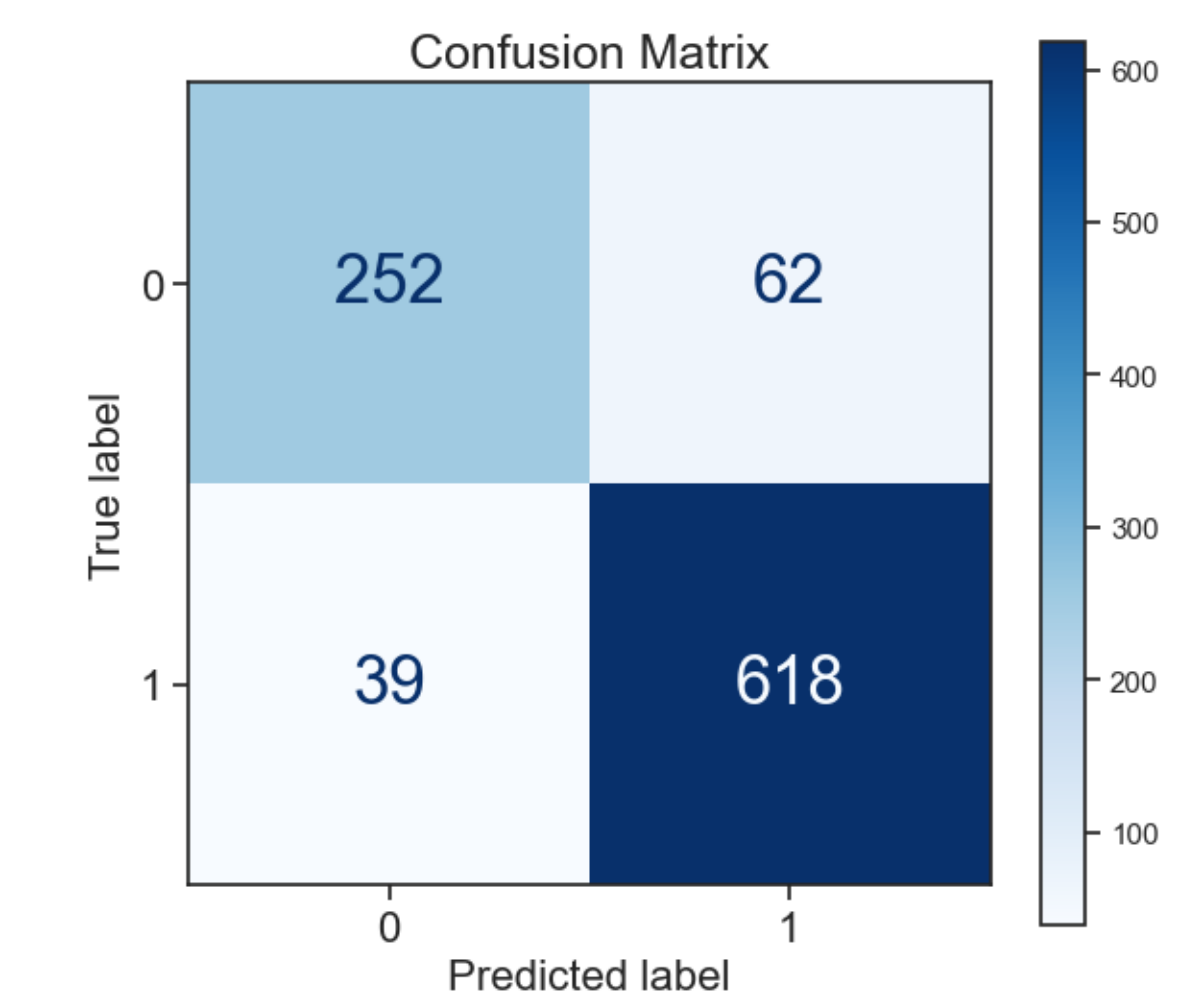


Metric	Train	Test
AUC	0.9997	0.9521
accuracy	0.9928	0.898
balanced accuracy	0.9905	0.8864
recall_(sens)	0.997	0.9193
specificity	0.9841	0.8535
precision	0.9924	0.9292
f1_score	0.9928	0.8983

Protein: P14416 - metric: f1

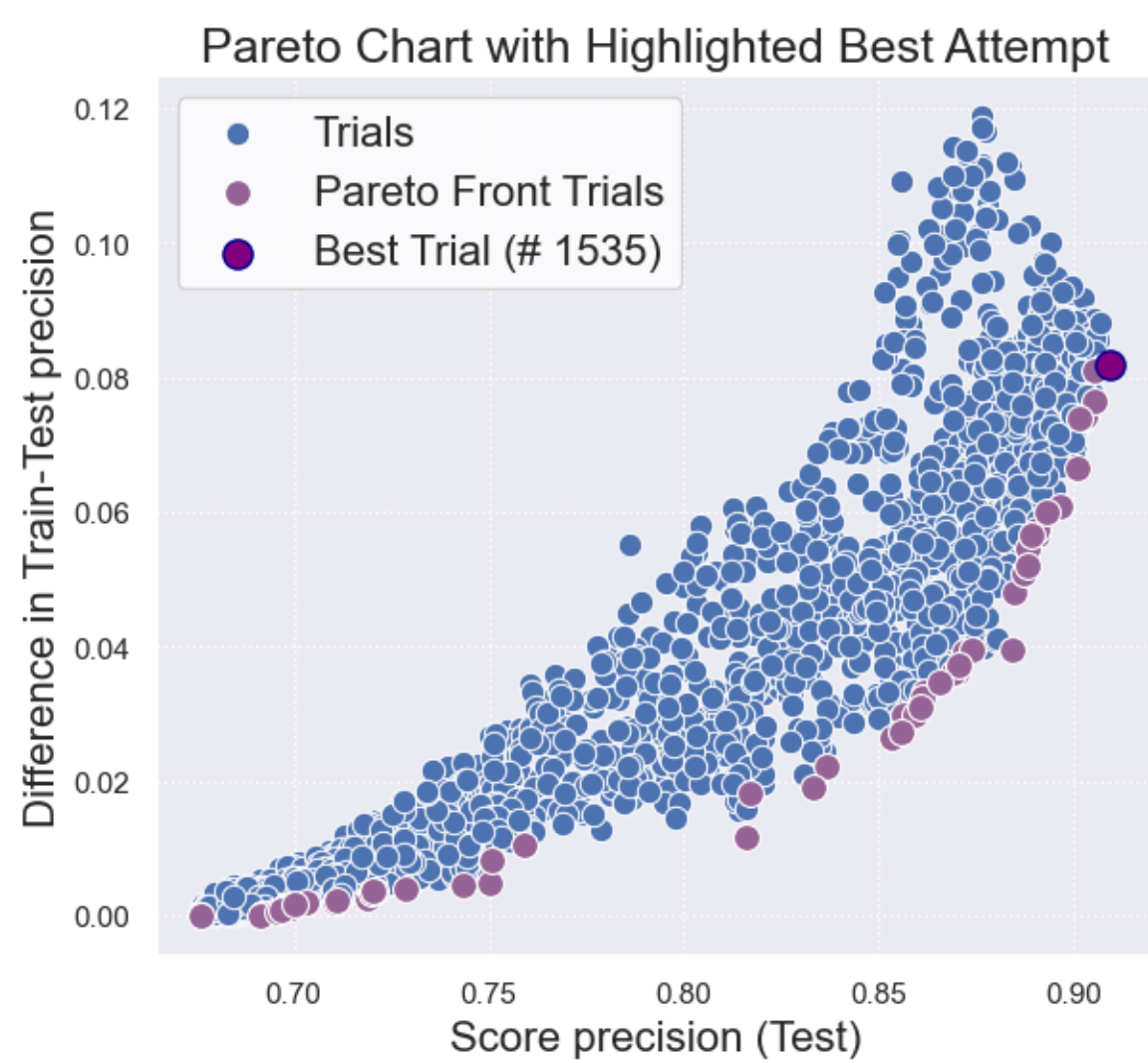
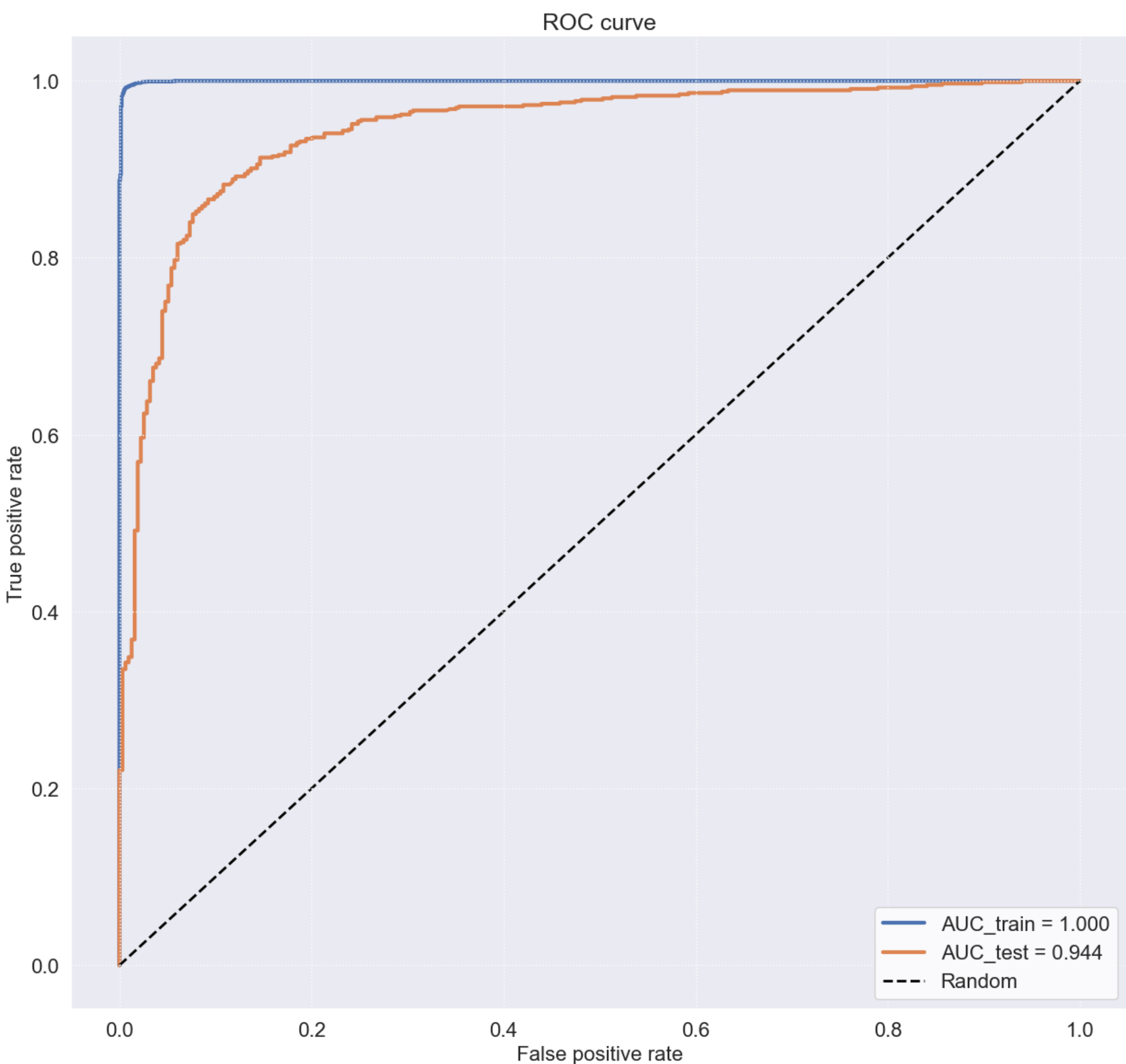
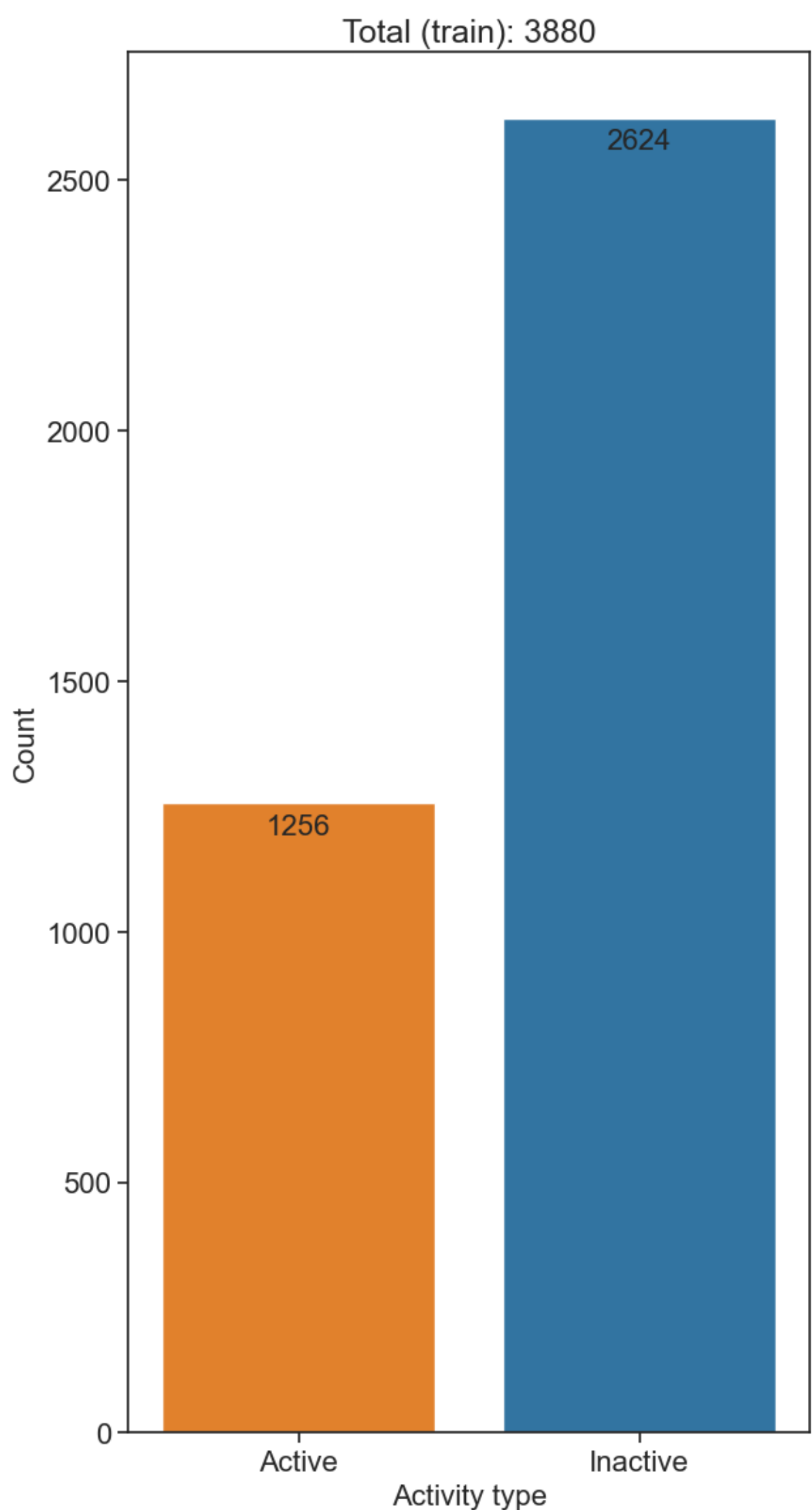


XGBoost Parameters		Value
alpha		4.1224
colsample_bytree		0.528
gamma		0.0785
lambda		1.471
learning_rate		0.0891
max_depth		10.0
min_child_weight		4.0
n_estimators		827.0
reg_alpha		0.8145
reg_lambda		0.294
scale_pos_weight		2.9707
subsample		0.7229

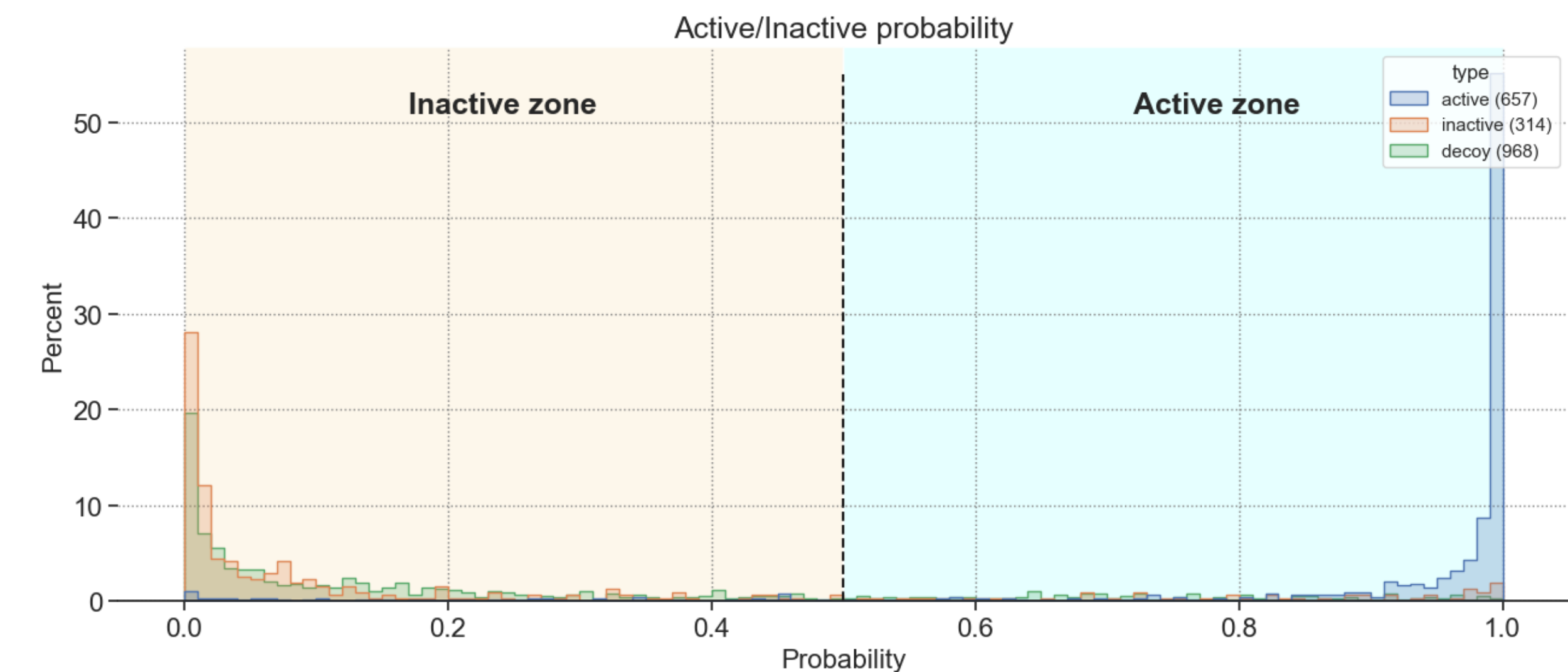
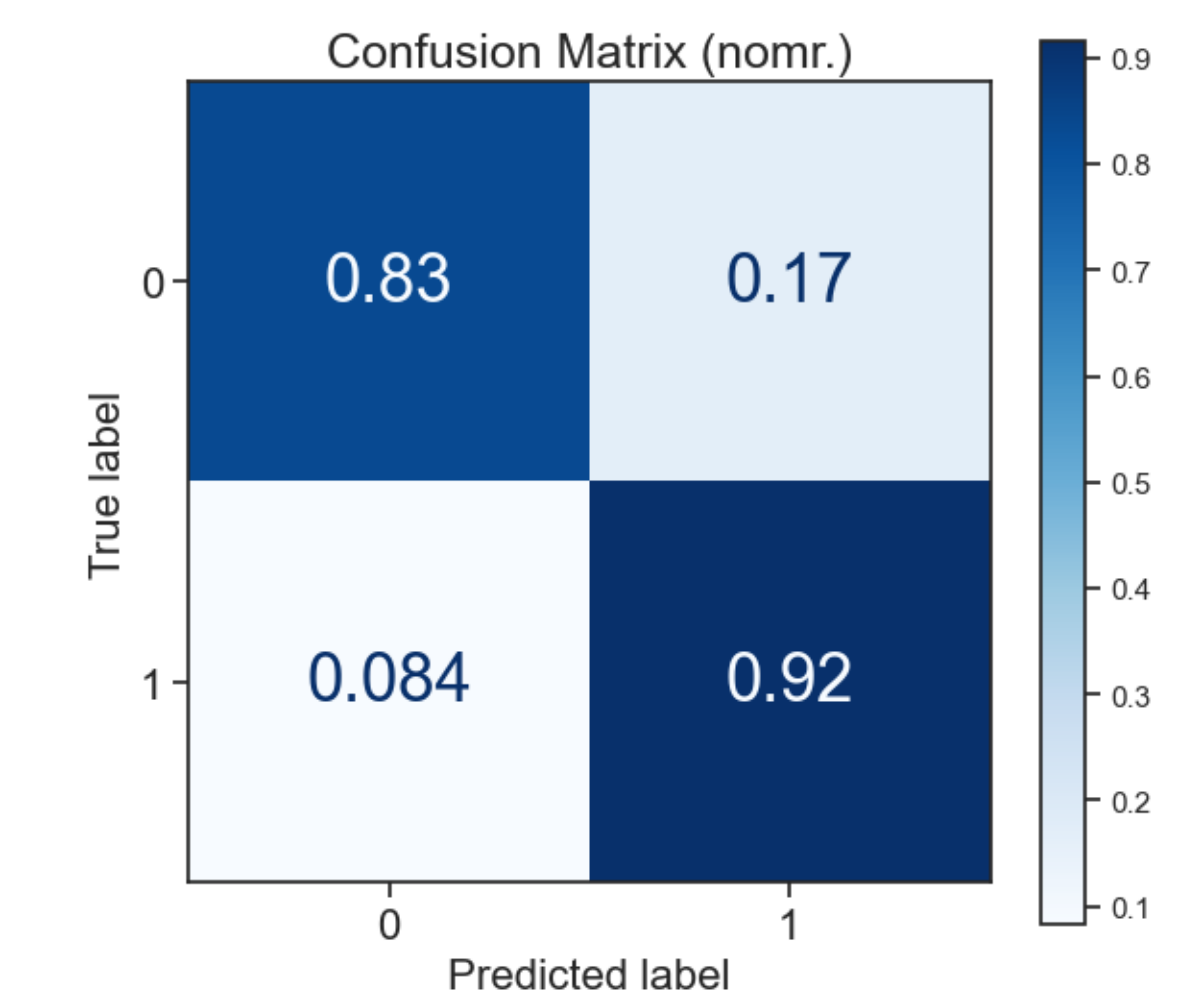
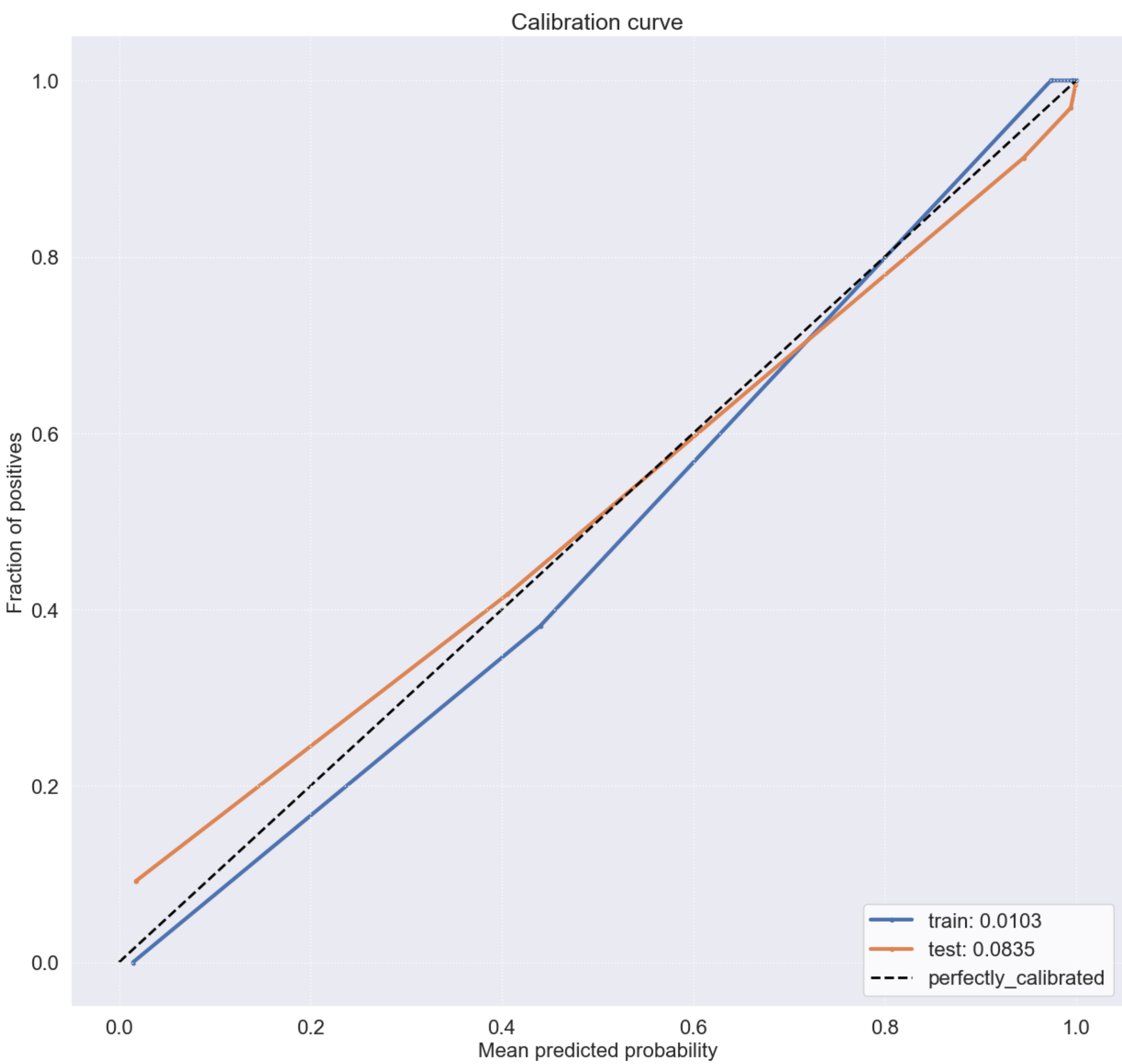
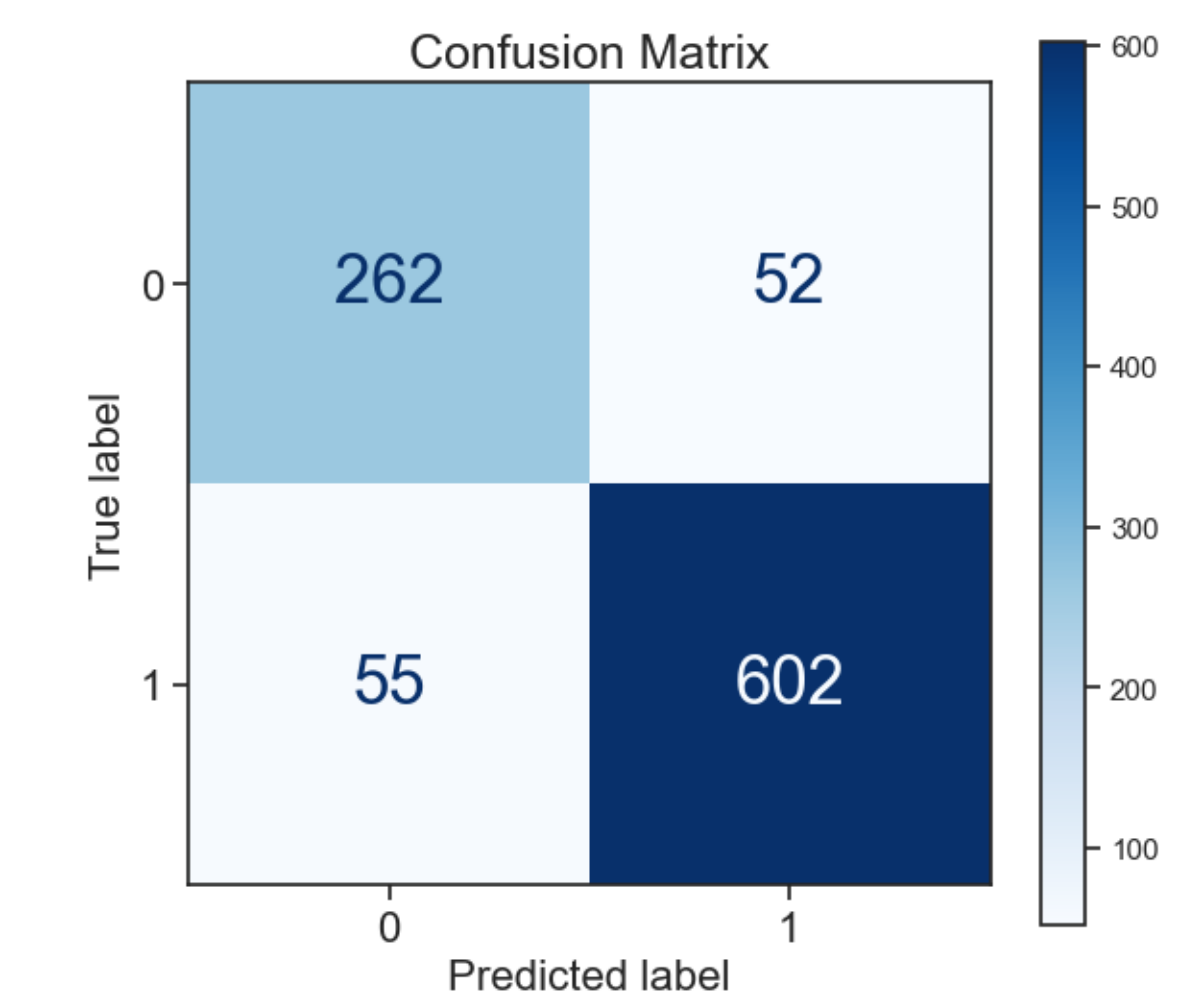


Metric	Train	Test
AUC	0.9996	0.9516
accuracy	0.9881	0.896
balanced accuracy	0.9817	0.8716
recall_(sens)	1.0	0.9406
specificity	0.9634	0.8025
precision	0.9828	0.9088
f1_score	0.9881	0.8949

Protein: P14416 - metric: precision

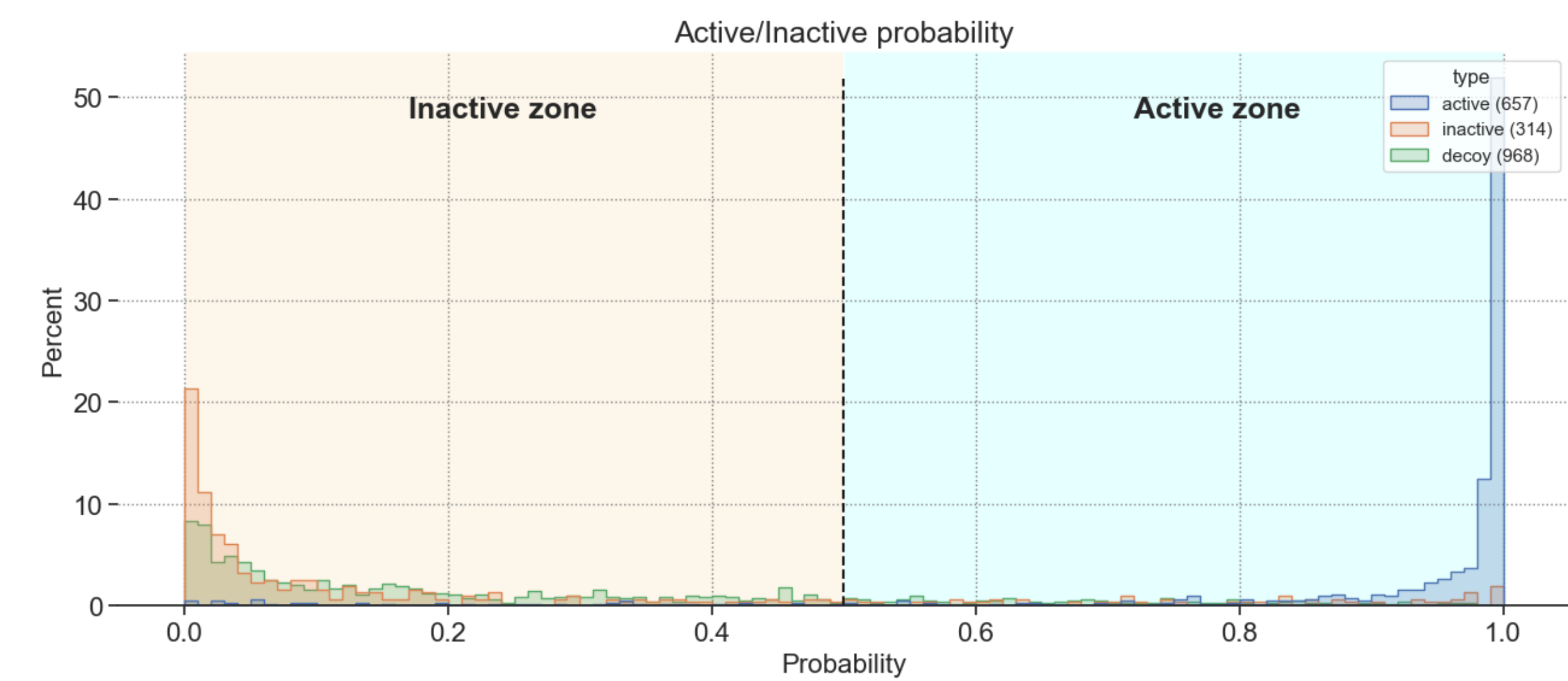
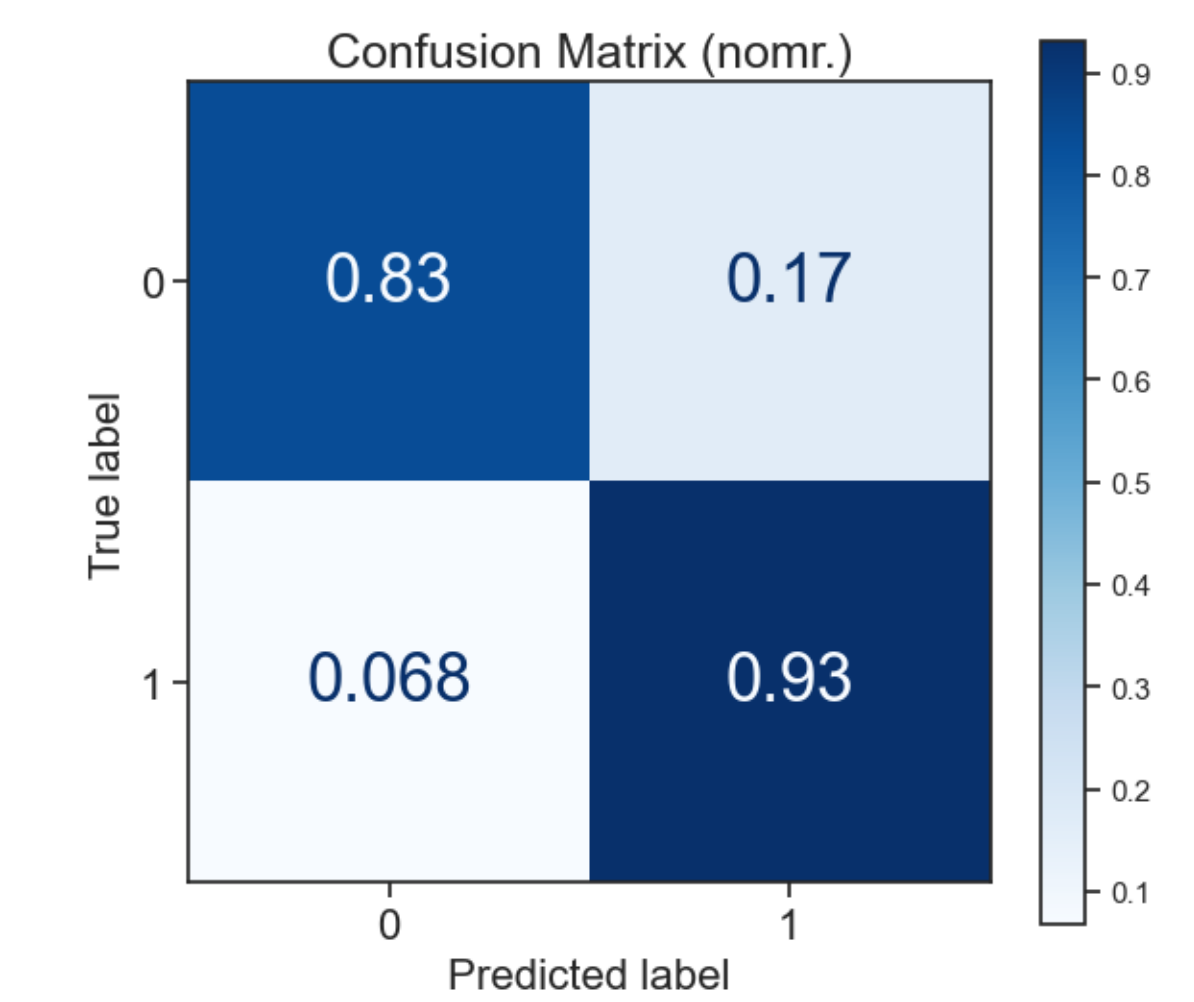
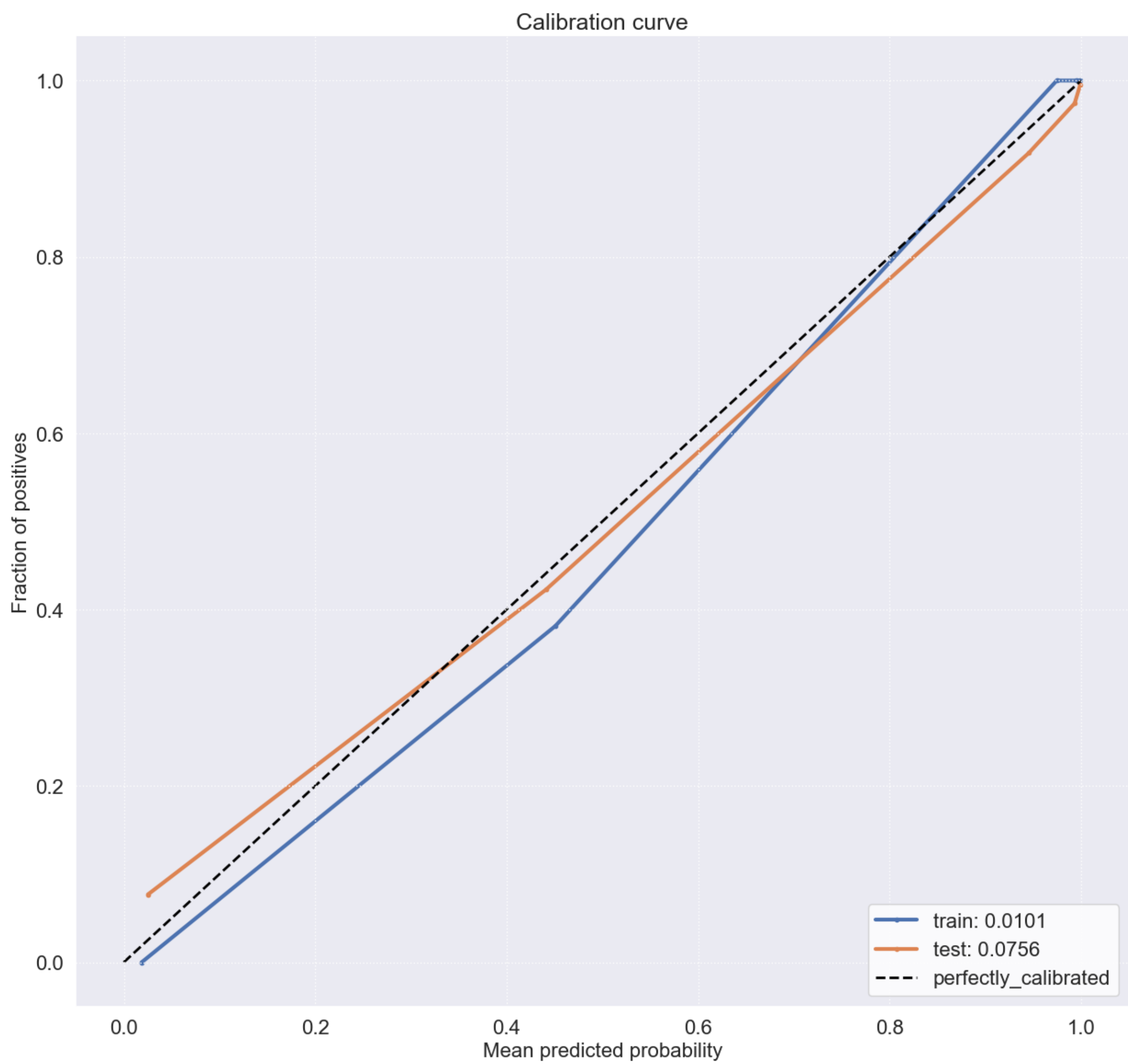
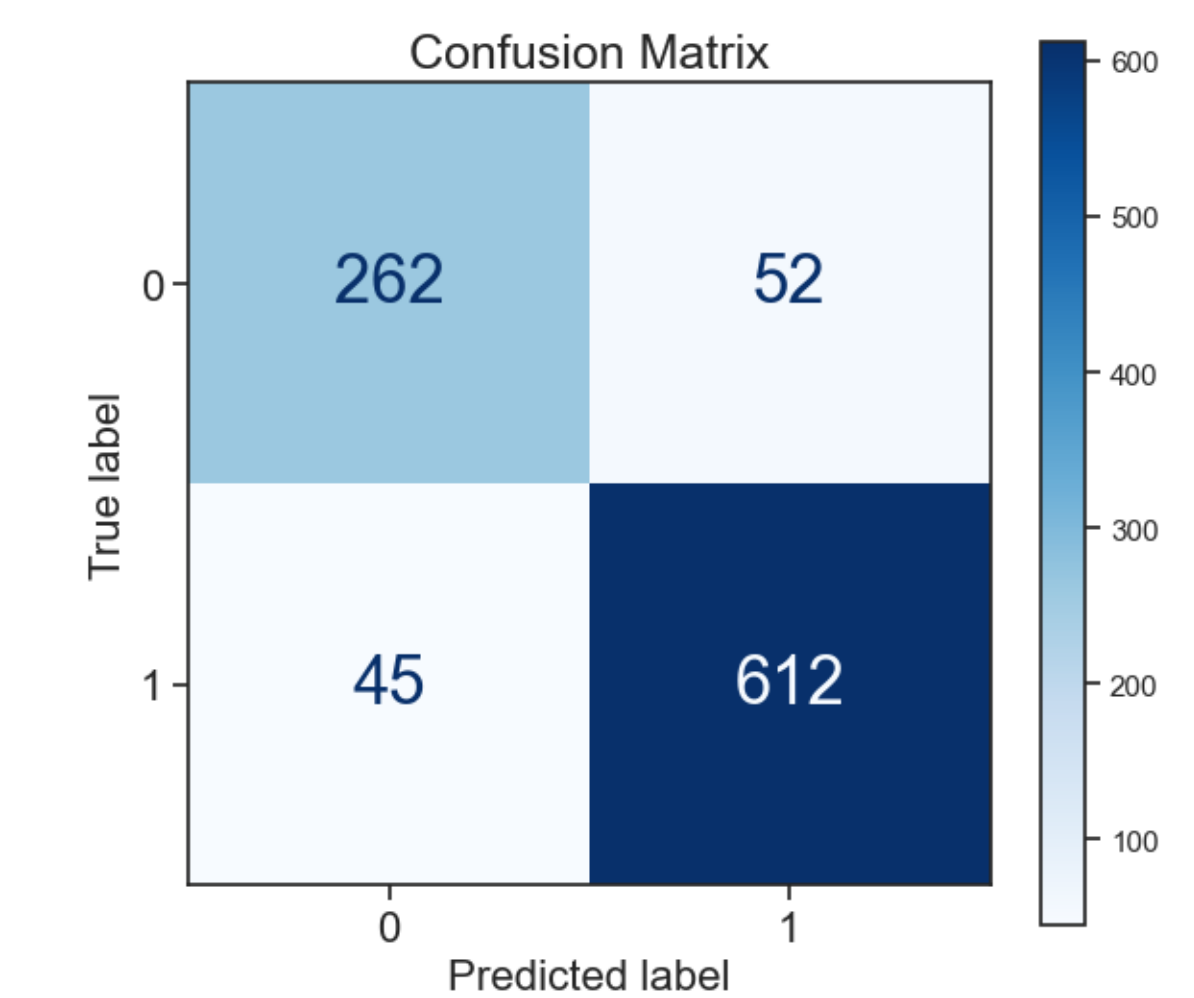
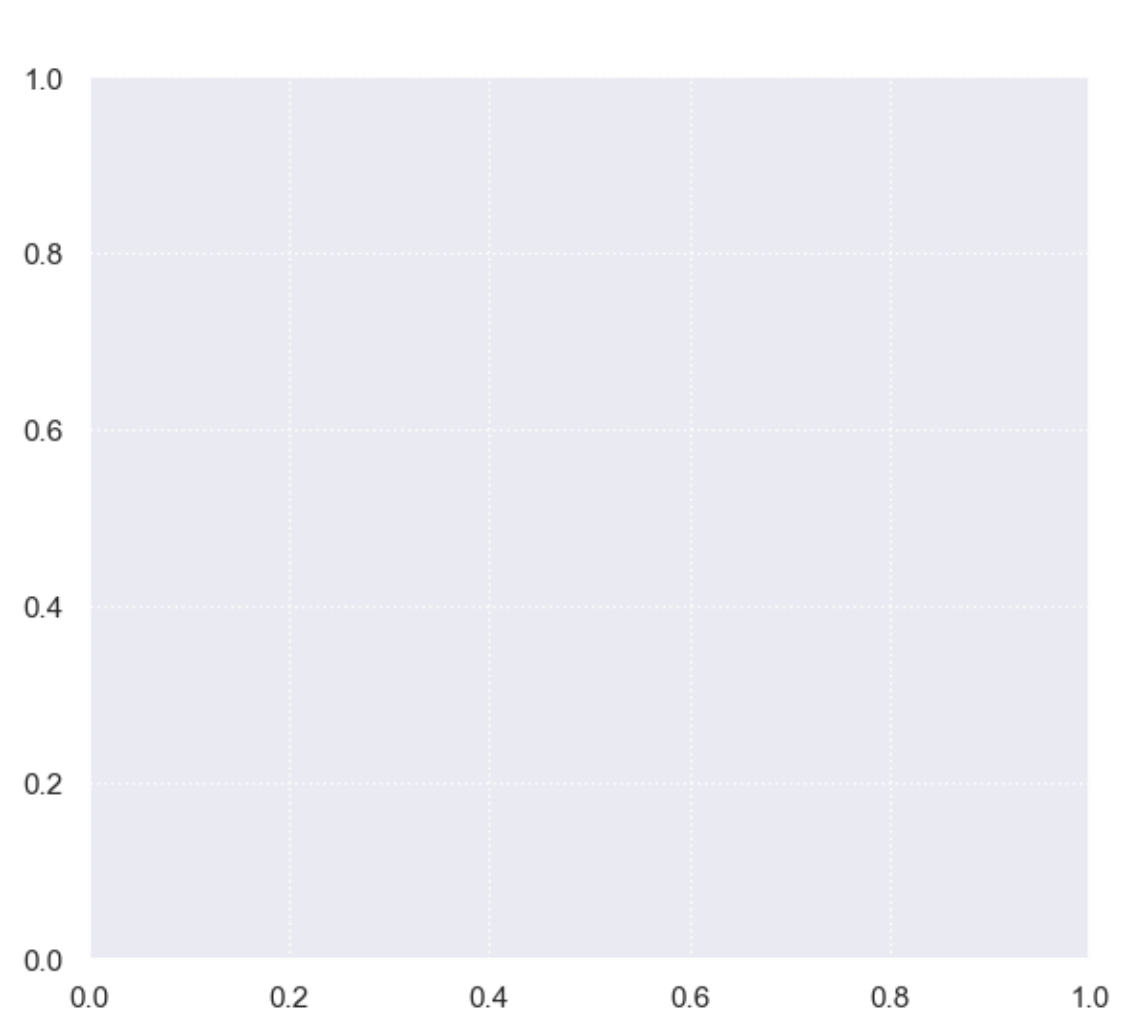
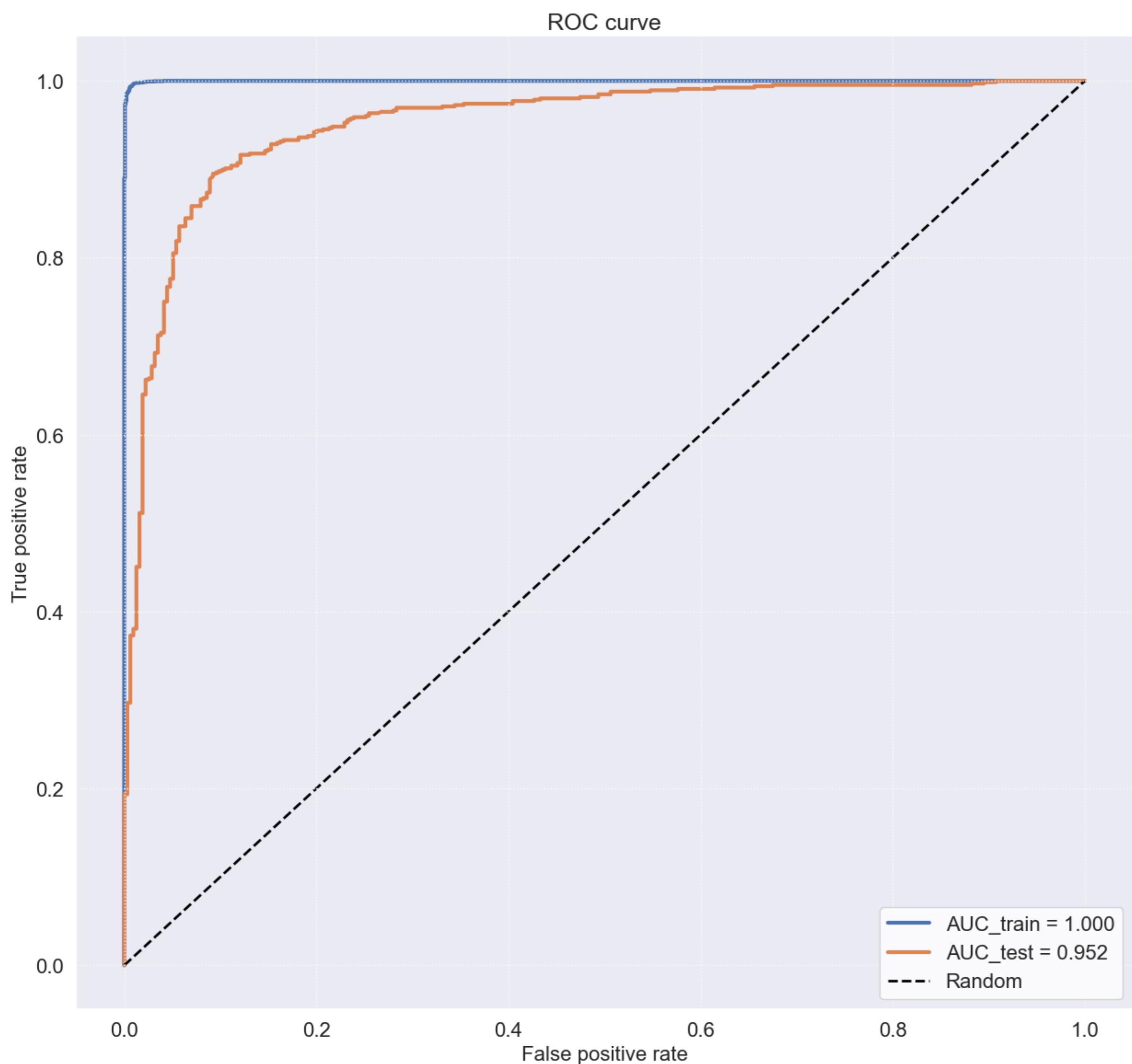
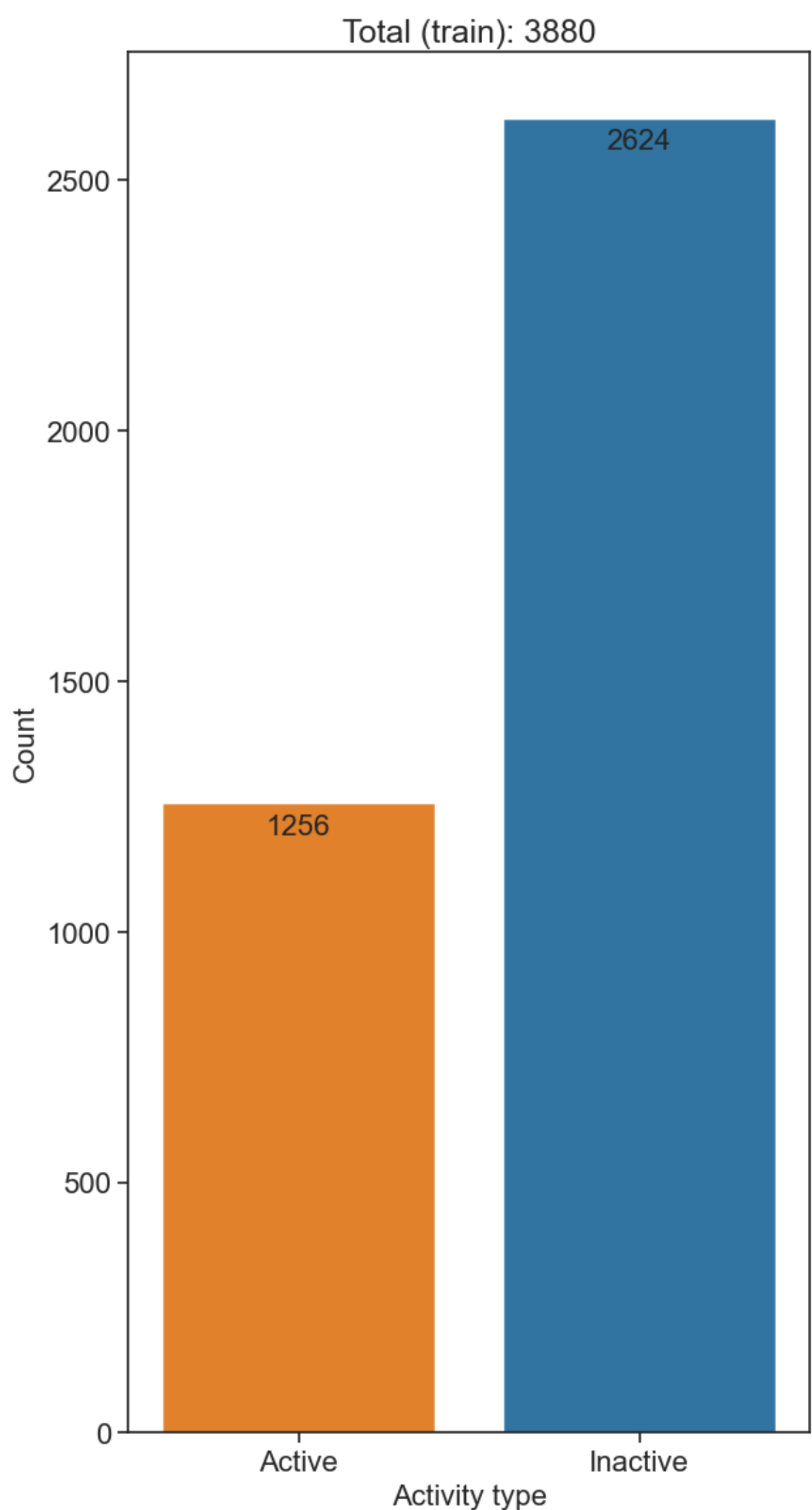


XGBoost Parameters	Value
alpha	4.0187
colsample_bytree	0.884
gamma	0.2711
lambda	1.9282
learning_rate	0.2204
max_depth	6.0
min_child_weight	5.0
n_estimators	626.0
reg_alpha	0.0592
reg_lambda	0.3243
scale_pos_weight	1.5016
subsample	0.7435



Metric	Train	Test
AUC	0.9997	0.9442
accuracy	0.9912	0.8898
balanced accuracy	0.9873	0.8753
recall_(sens)	0.9985	0.9163
specificity	0.9761	0.8344
precision	0.9887	0.9205
f1_score	0.9912	0.8899

Protein: P14416 - metric: SoftVotingXGBoostEnsemble



Metric	Train	Test
AUC	0.9998	0.9521
accuracy	0.9915	0.9001
balanced accuracy	0.9875	0.883
recall_(sens)	0.9989	0.9315
specificity	0.9761	0.8344
precision	0.9887	0.9217
f1_score	0.9915	0.8998