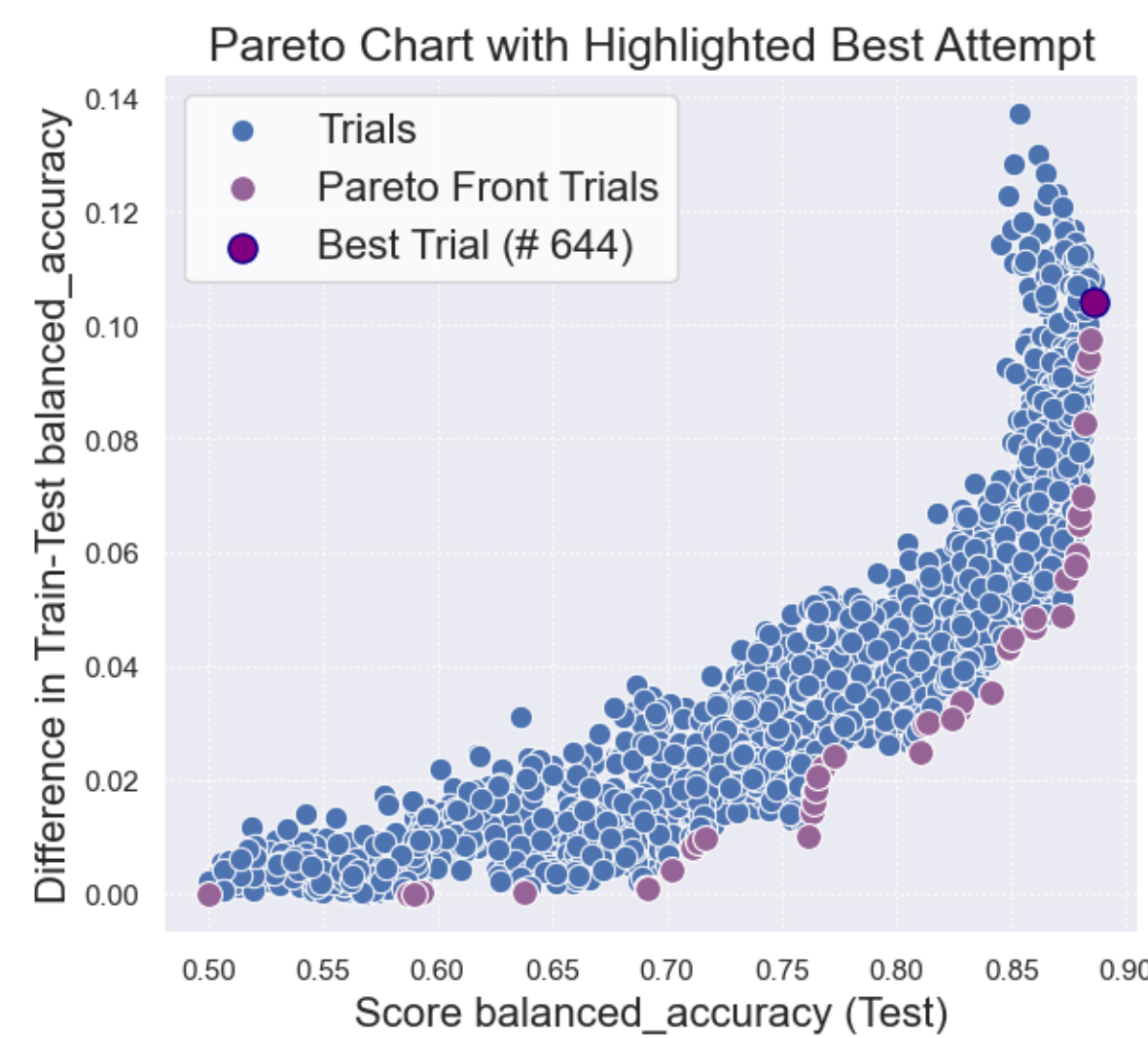
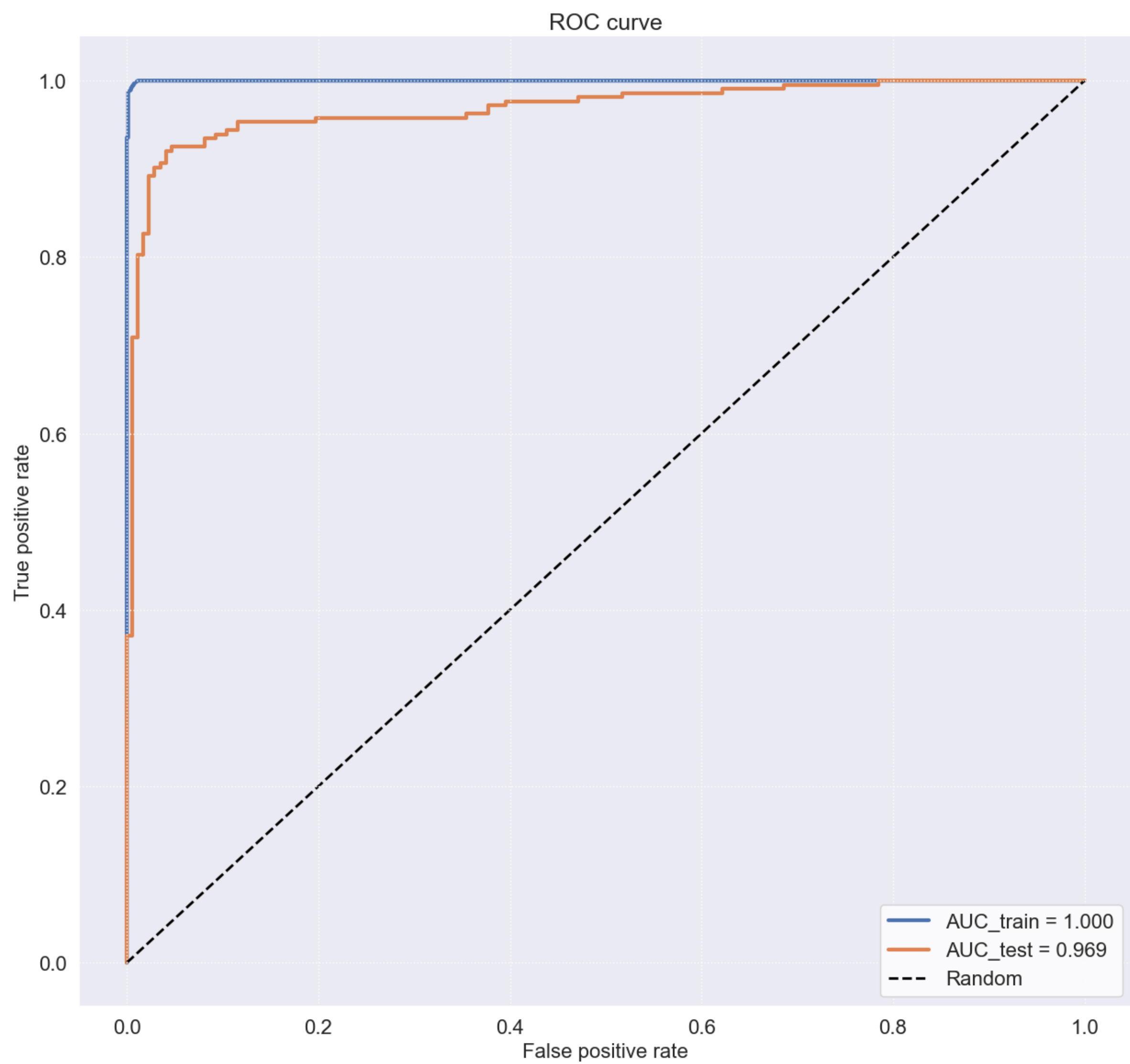
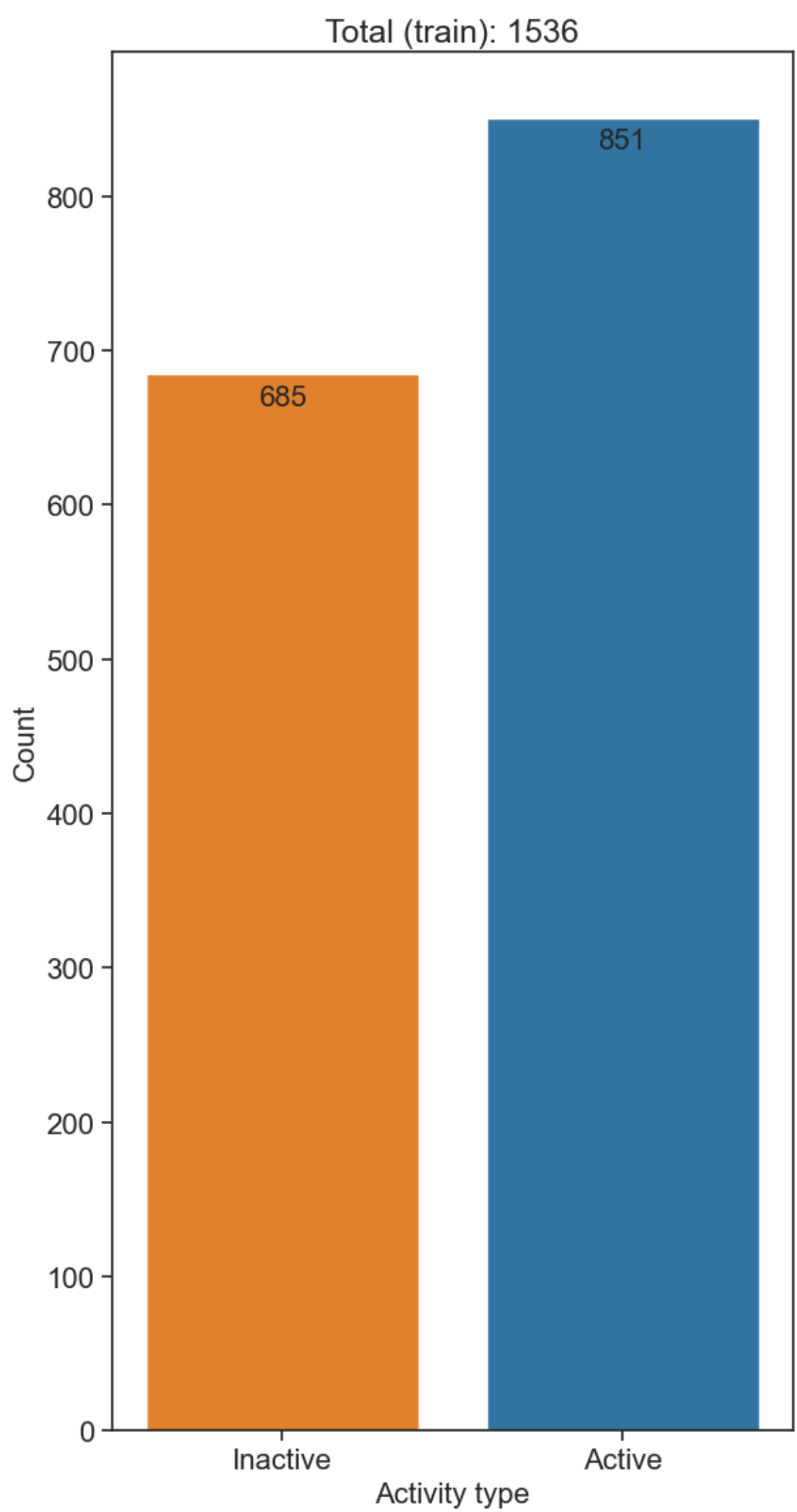
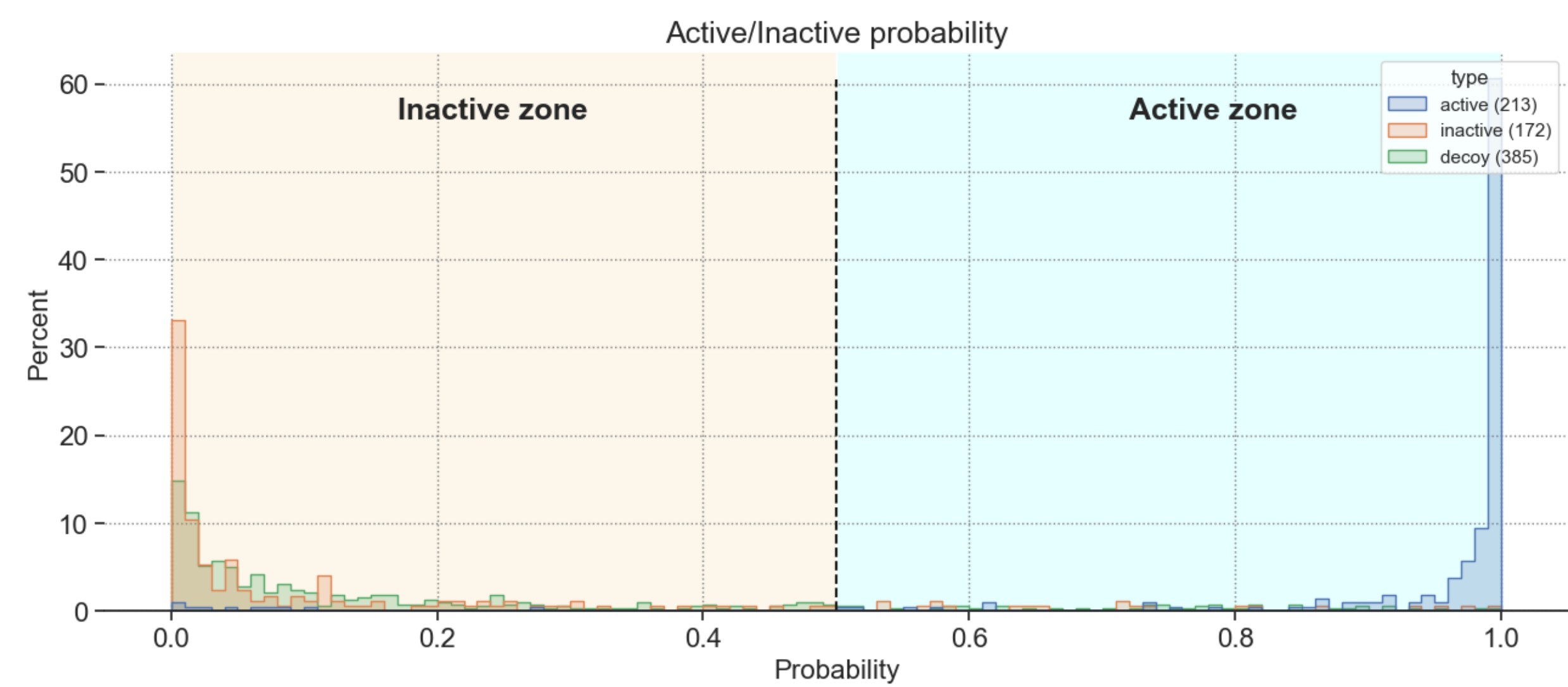
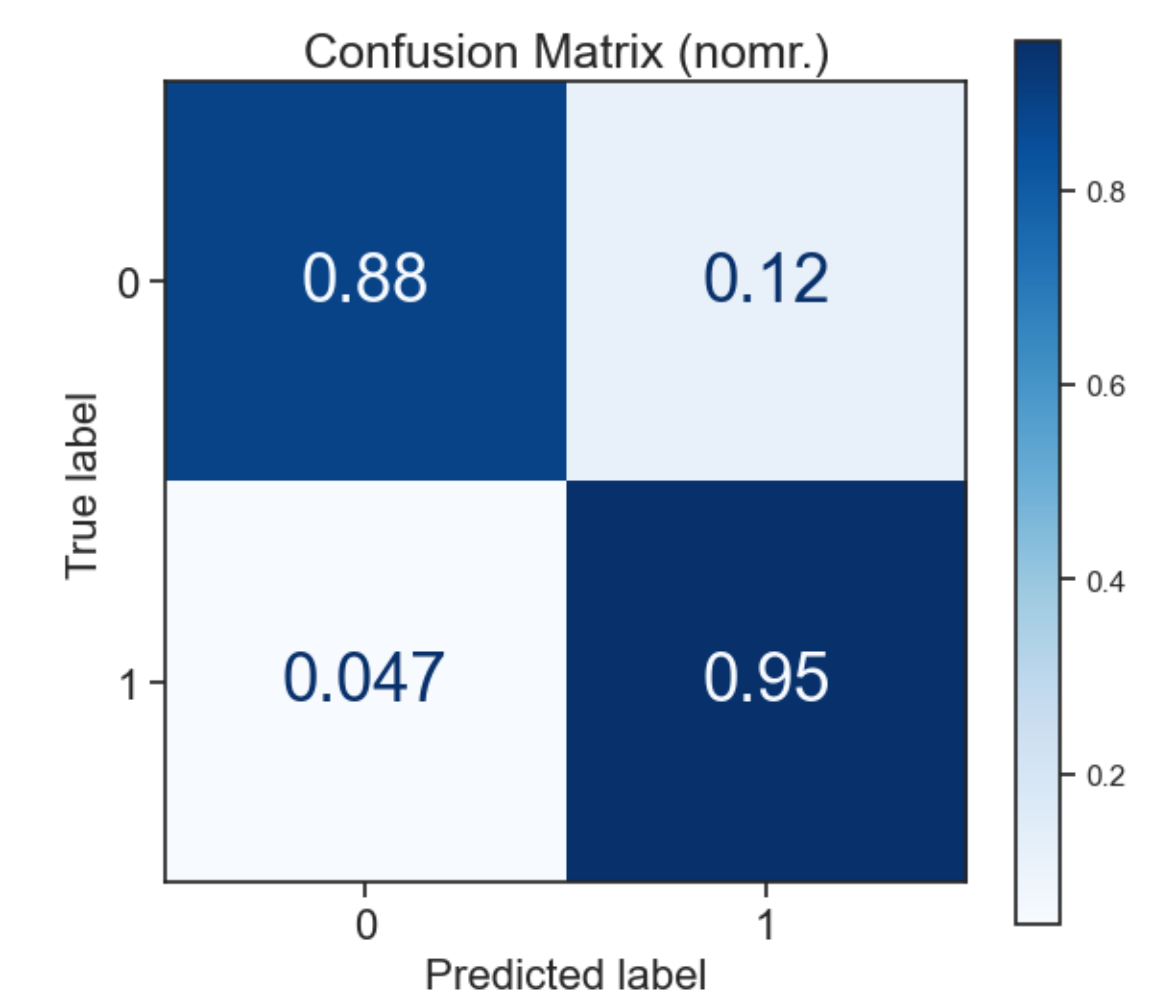
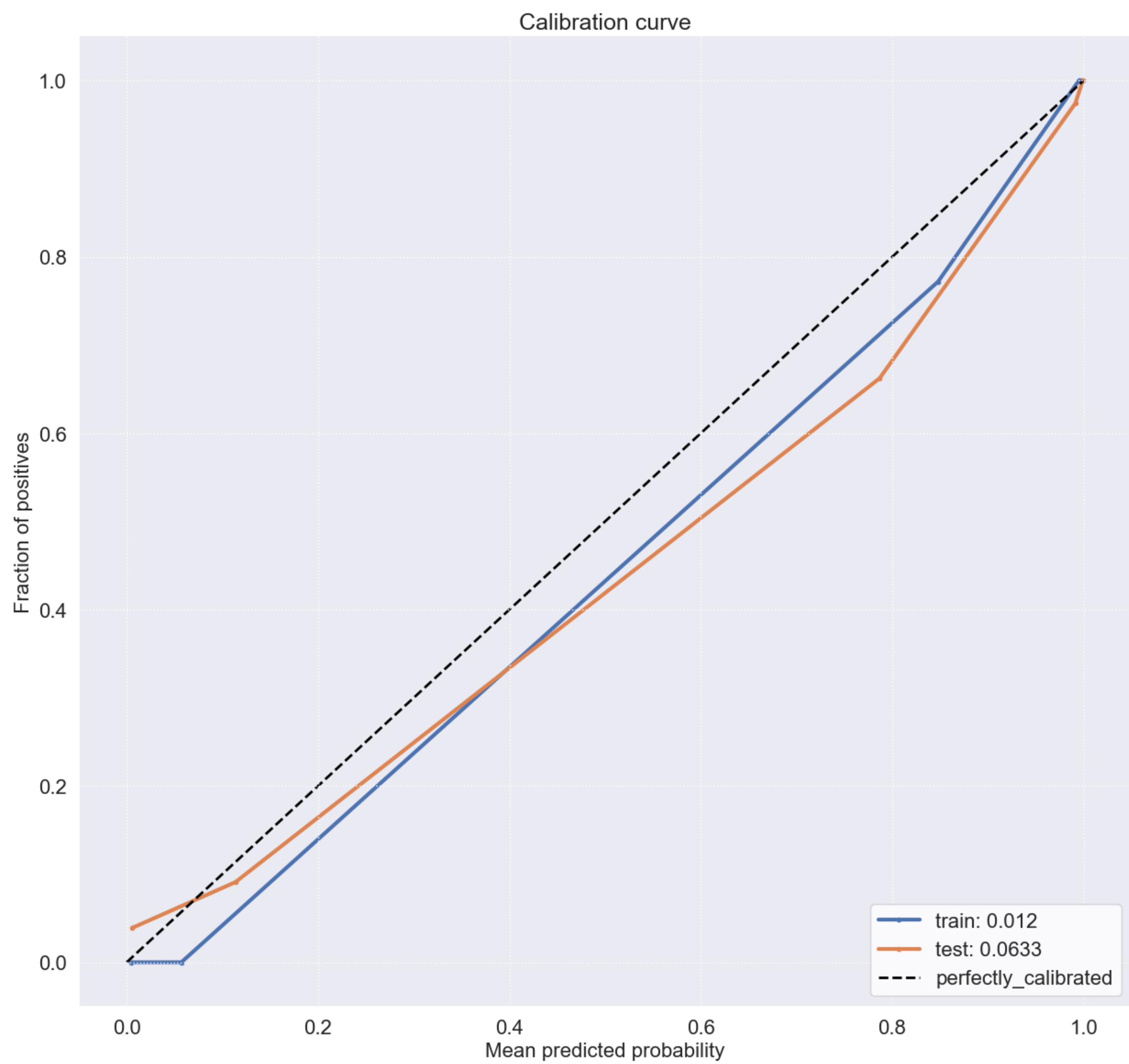
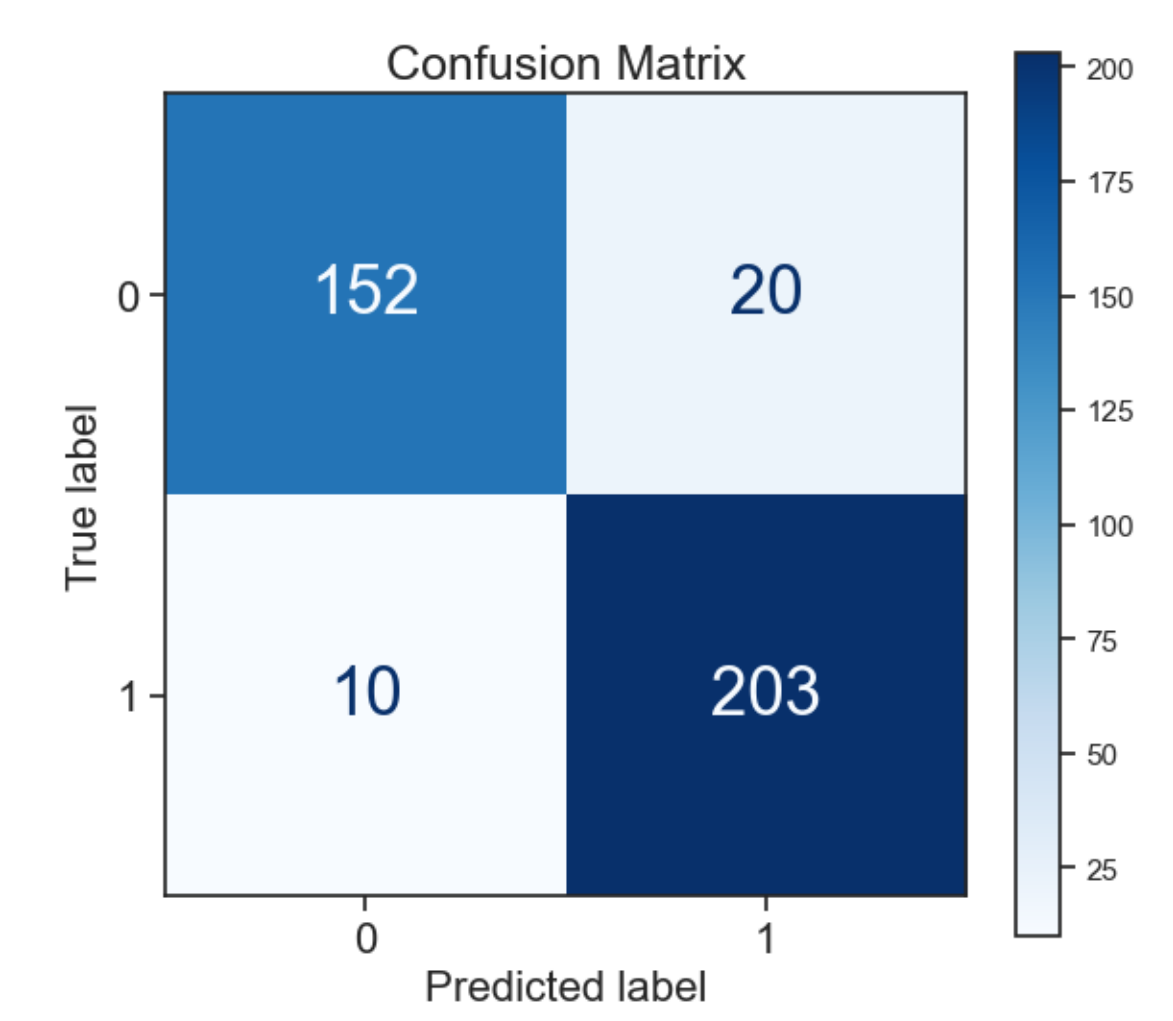


Protein: P45452 - metric: balanced_accuracy

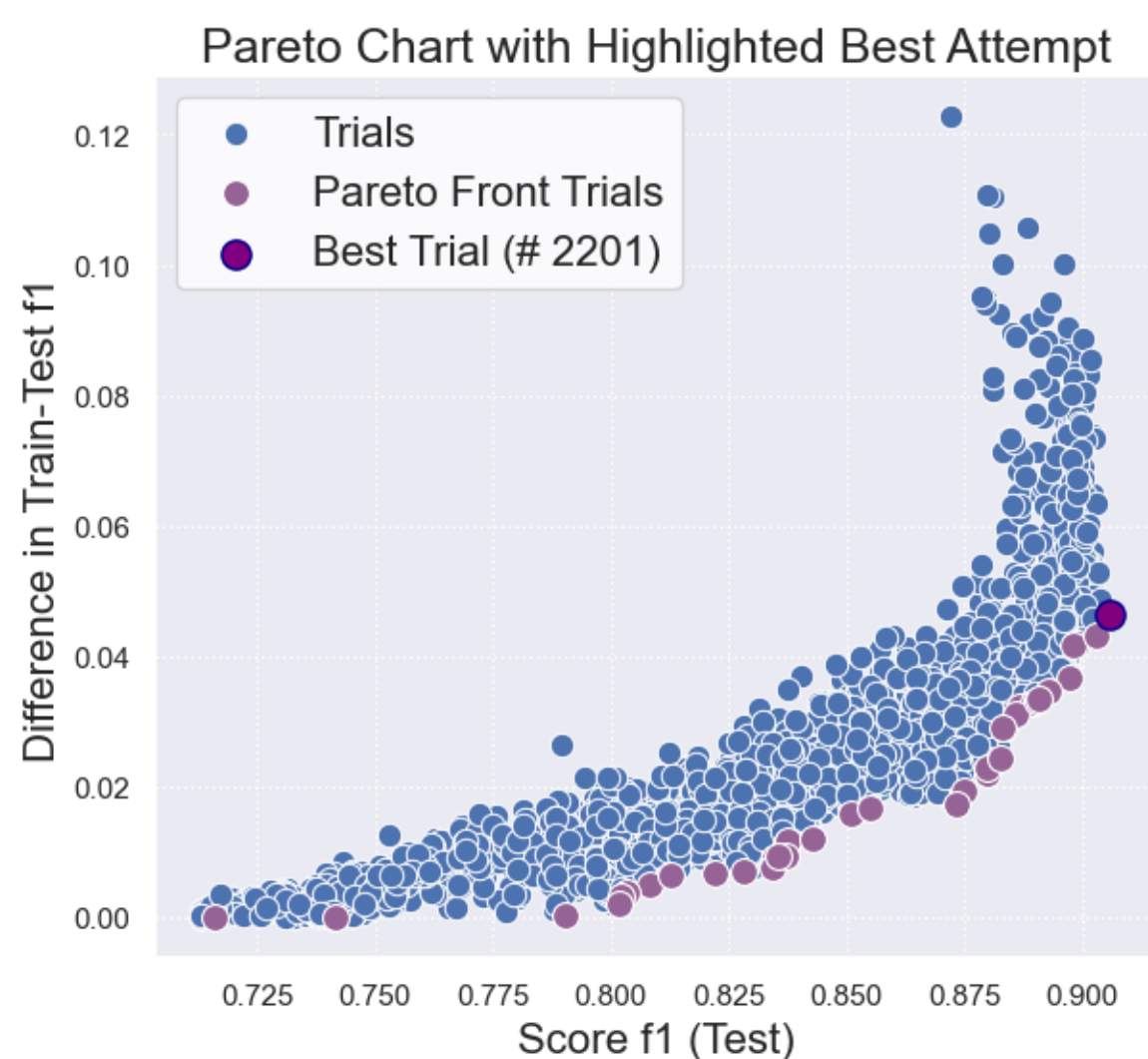
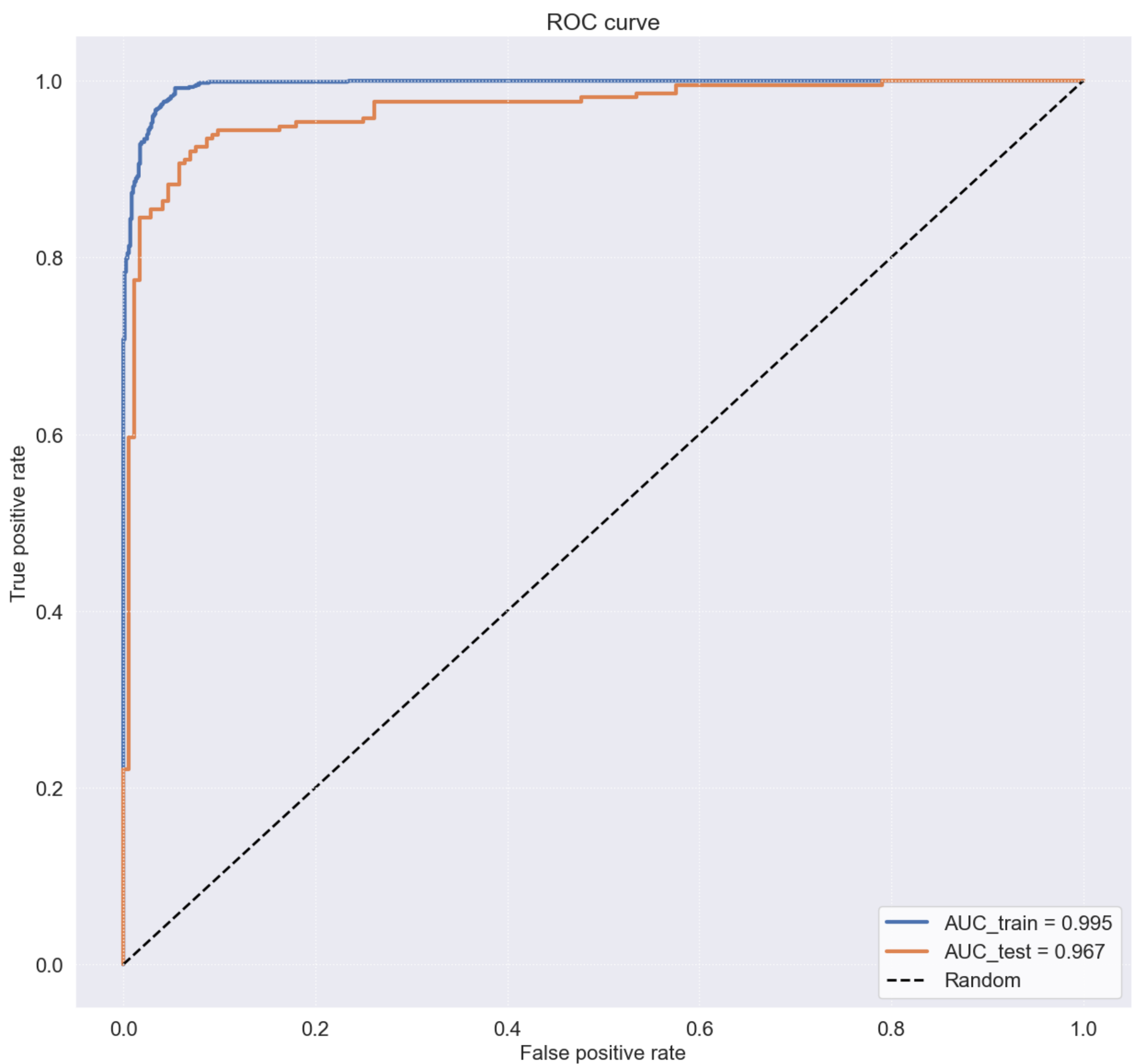
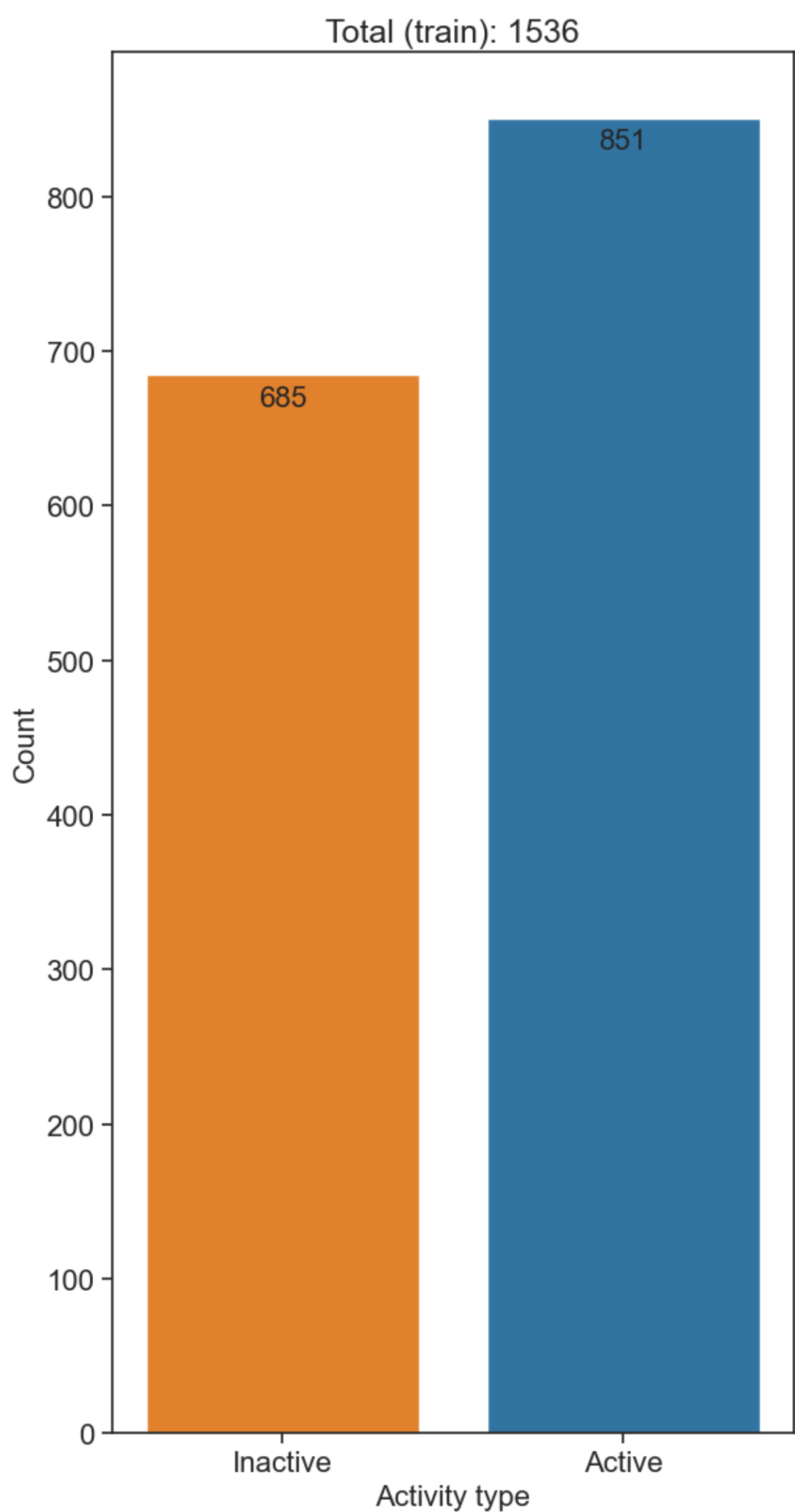


XGBoost Parameters		Value
alpha		0.4176
colsample_bytree		0.514
gamma		0.0419
lambda		3.3773
learning_rate		0.0537
max_depth		7.0
min_child_weight		1.0
n_estimators		789.0
reg_alpha		0.0049
reg_lambda		0.883
scale_pos_weight		5.5136
subsample		0.9241

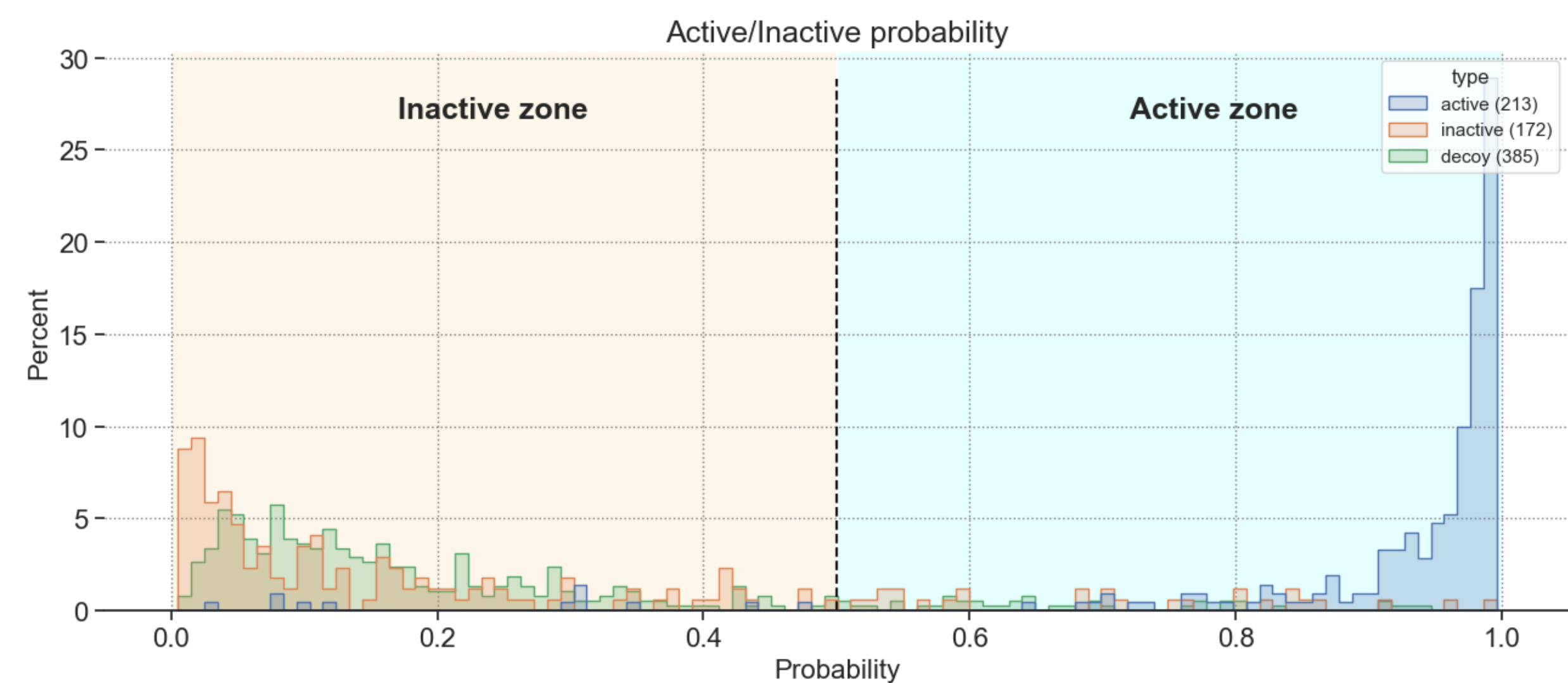
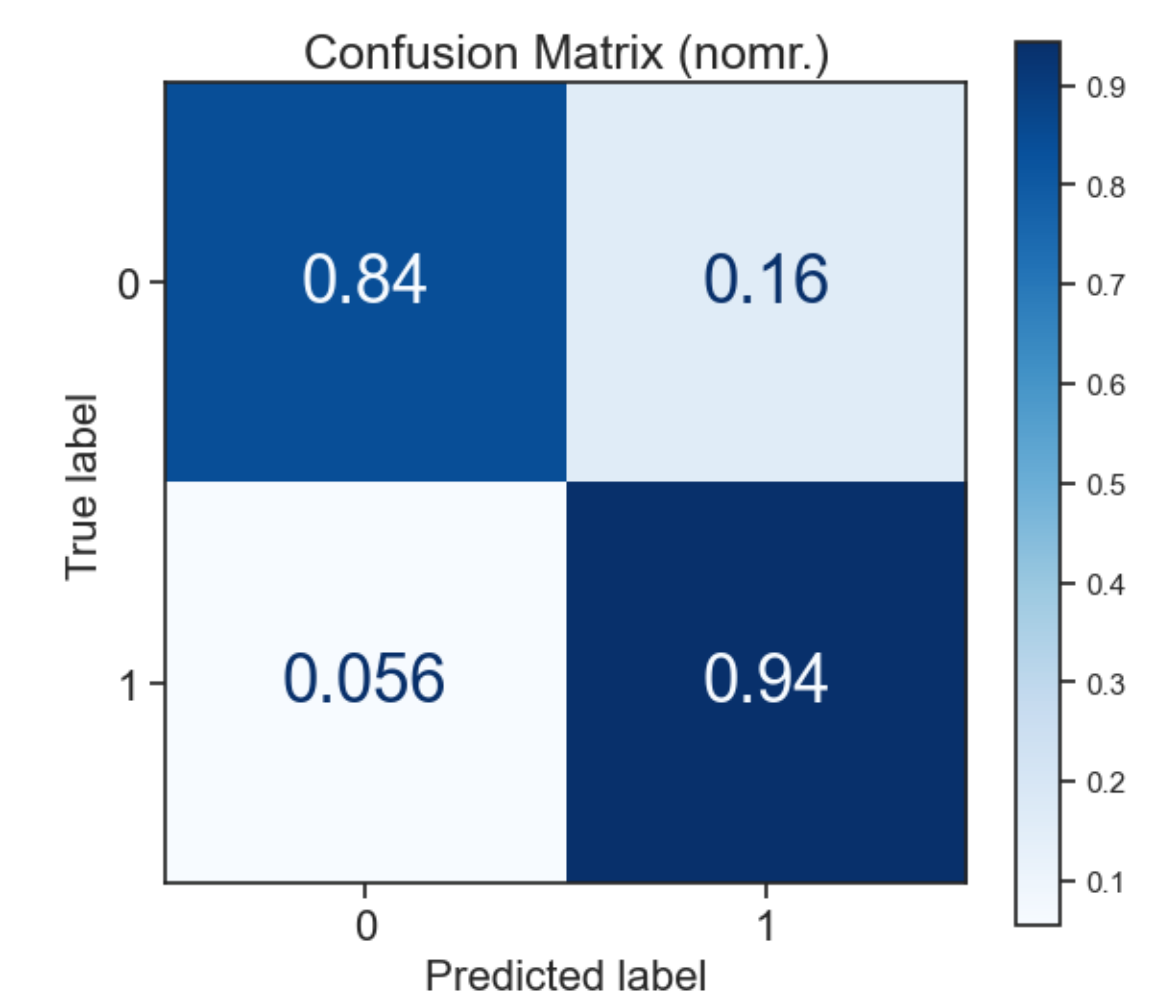
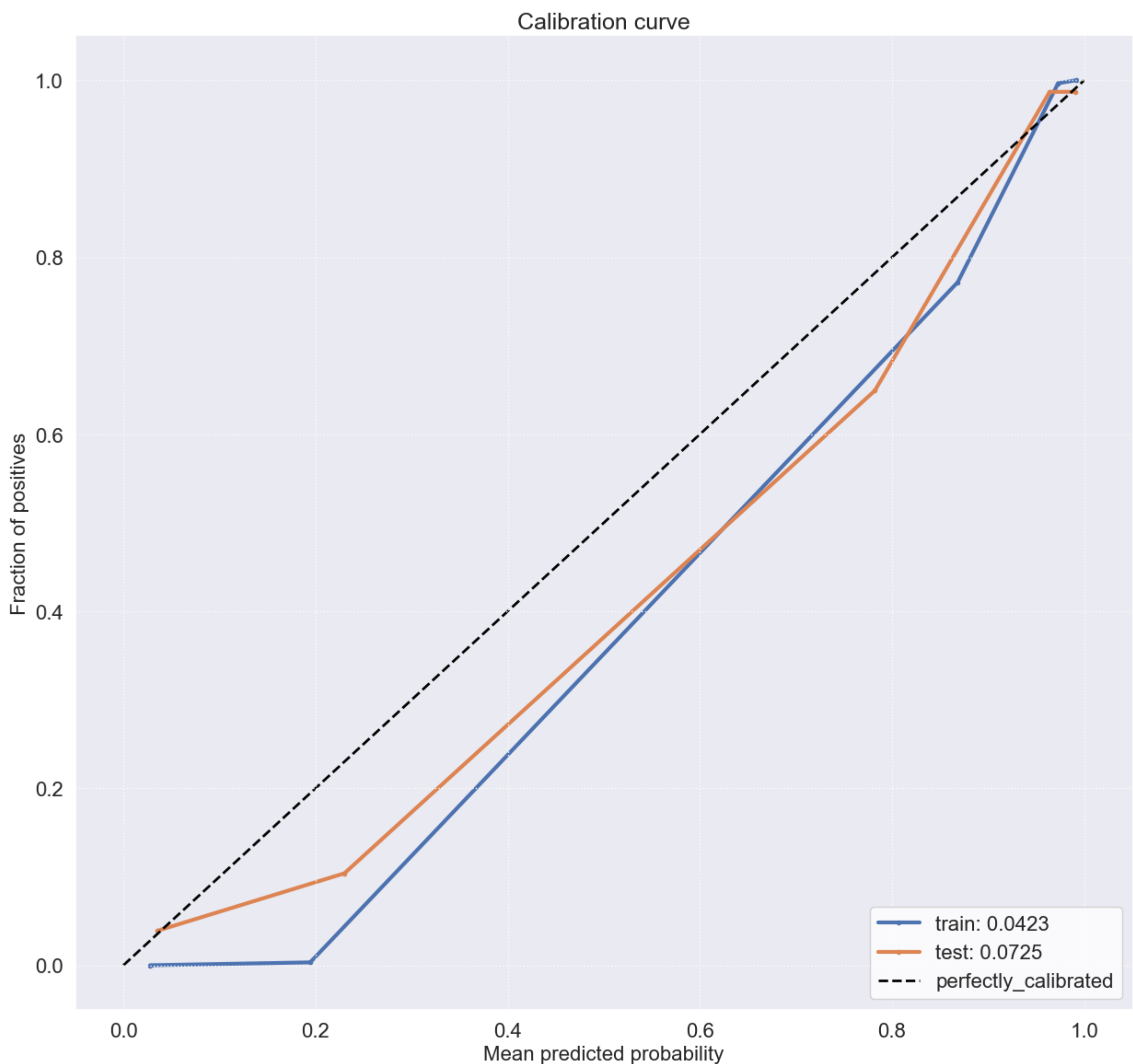
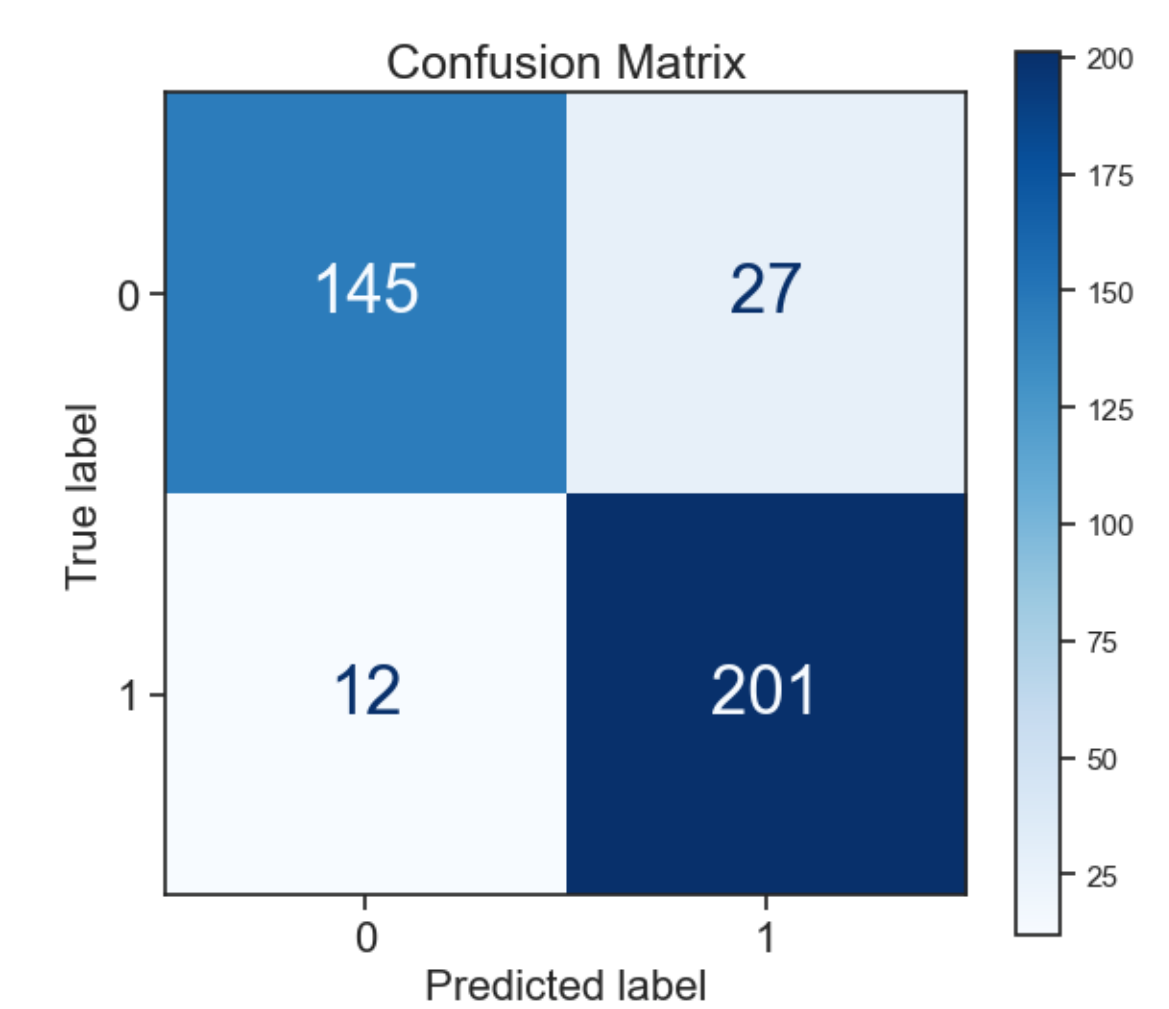


Metric	Train	Test
AUC	0.9998	0.9685
accuracy	0.987	0.9221
balanced accuracy	0.9854	0.9184
recall_(sens)	1.0	0.9531
specificity	0.9708	0.8837
precision	0.977	0.9103
f1_score	0.987	0.9218

Protein: P45452 - metric: f1

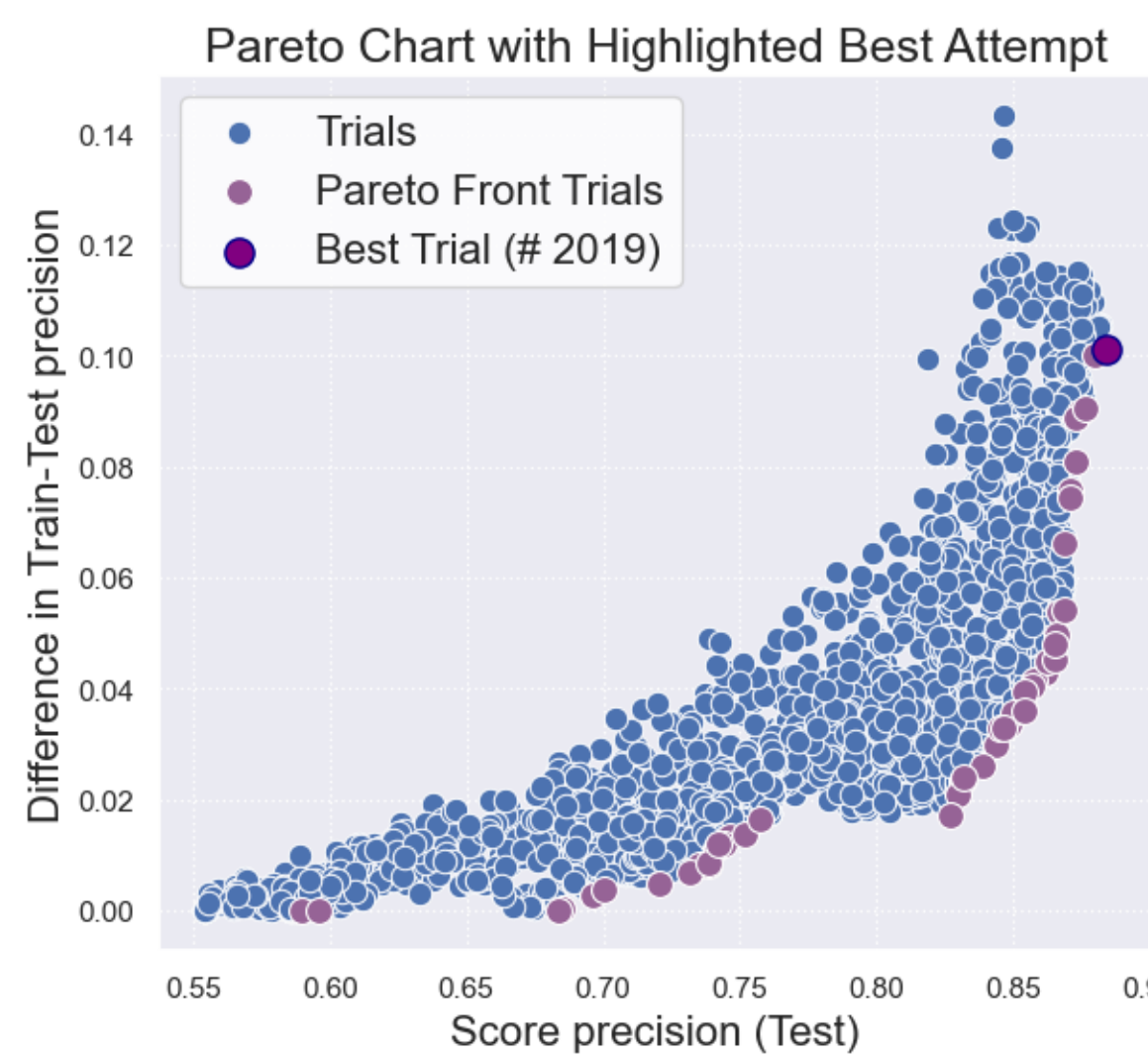
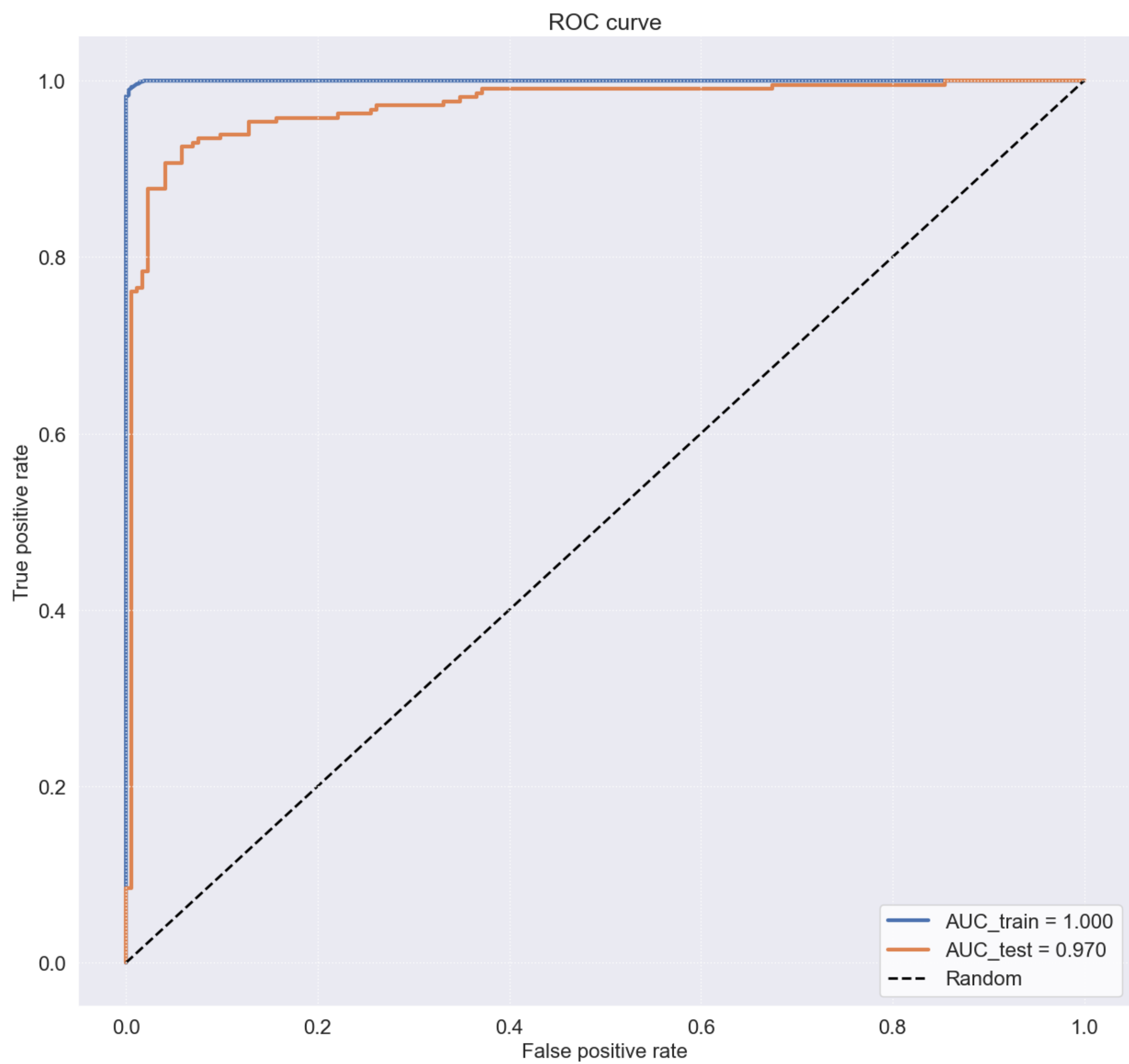
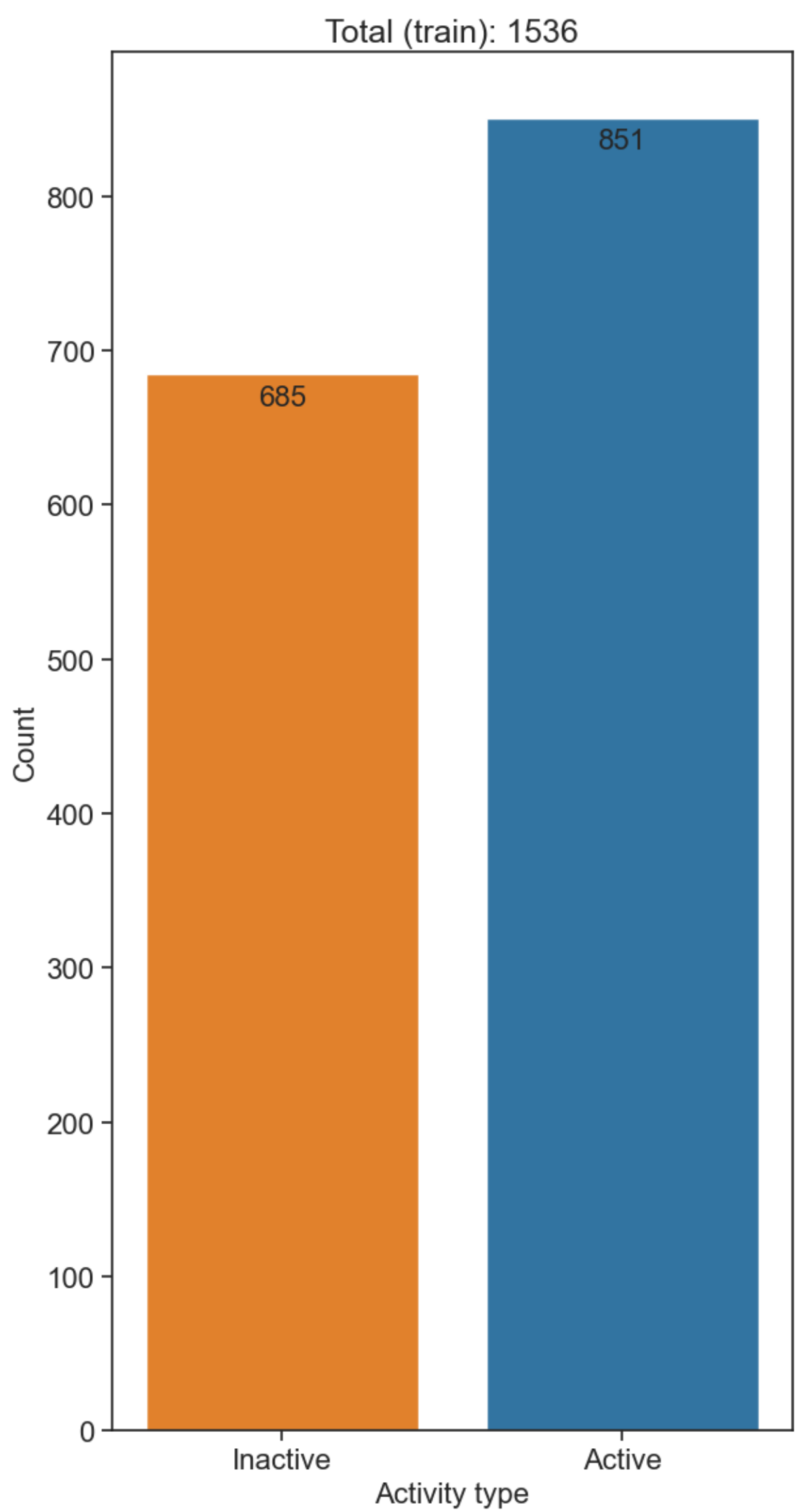


XGBoost Parameters	Value
alpha	2.5225
colsample_bytree	0.6923
gamma	0.1748
lambda	4.1516
learning_rate	0.0186
max_depth	10.0
min_child_weight	2.0
n_estimators	377.0
reg_alpha	0.8839
reg_lambda	0.1522
scale_pos_weight	3.5447
subsample	0.9389

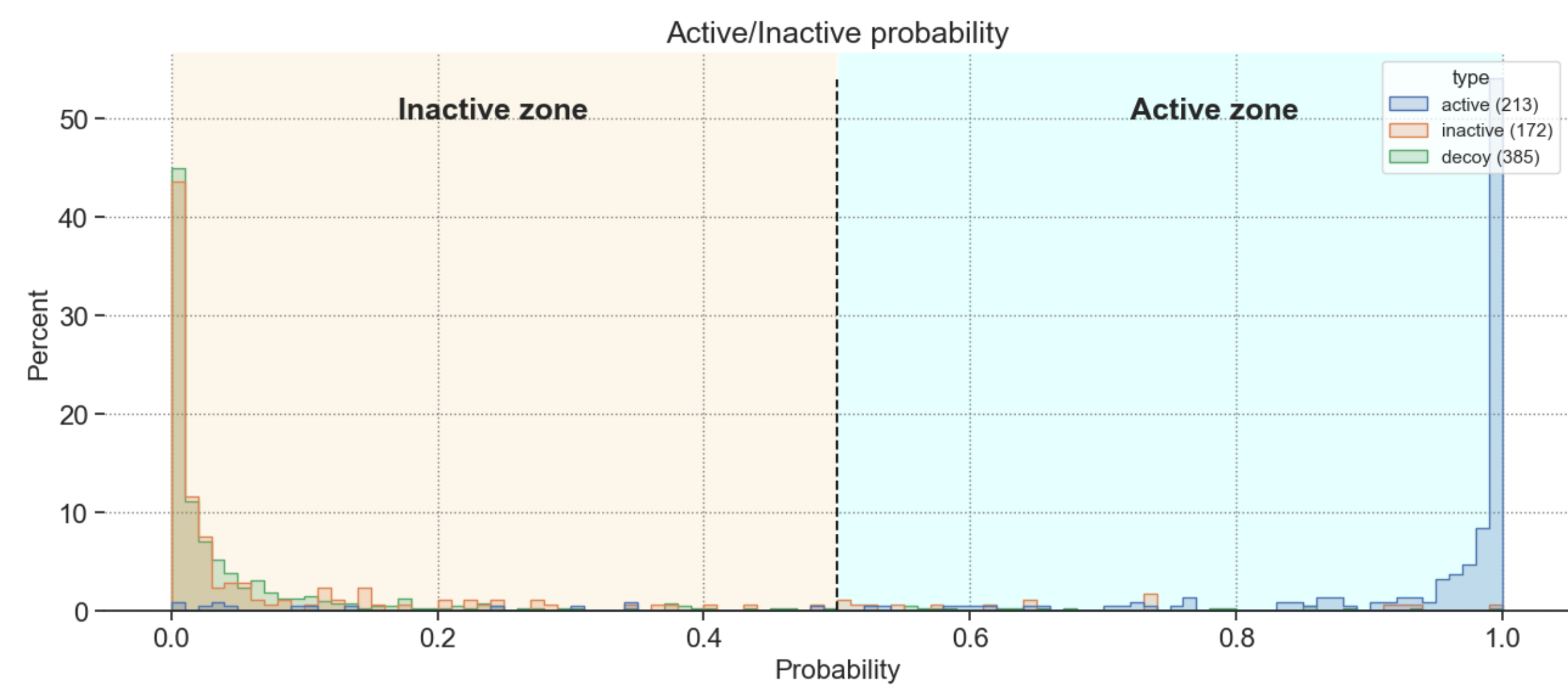
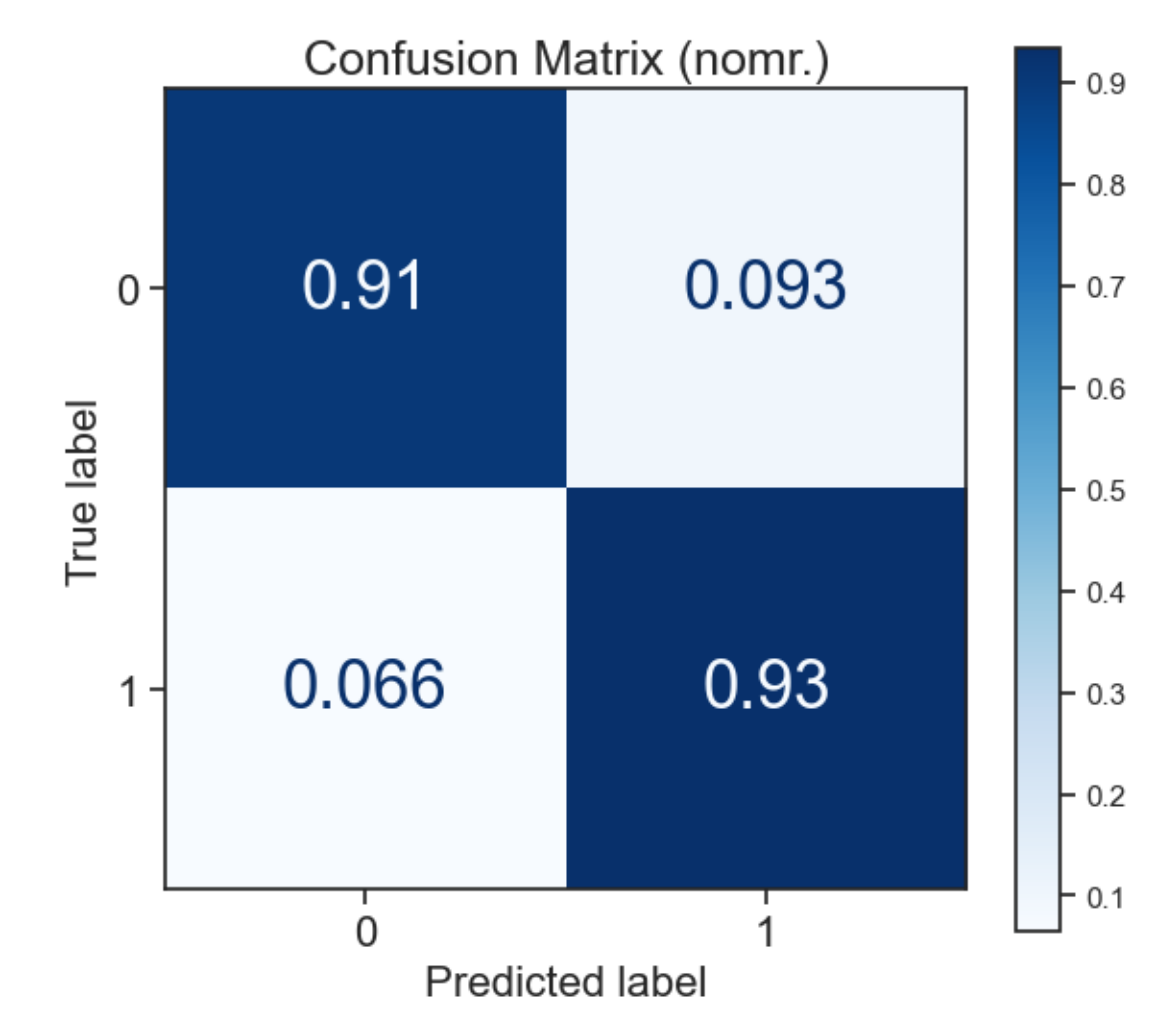
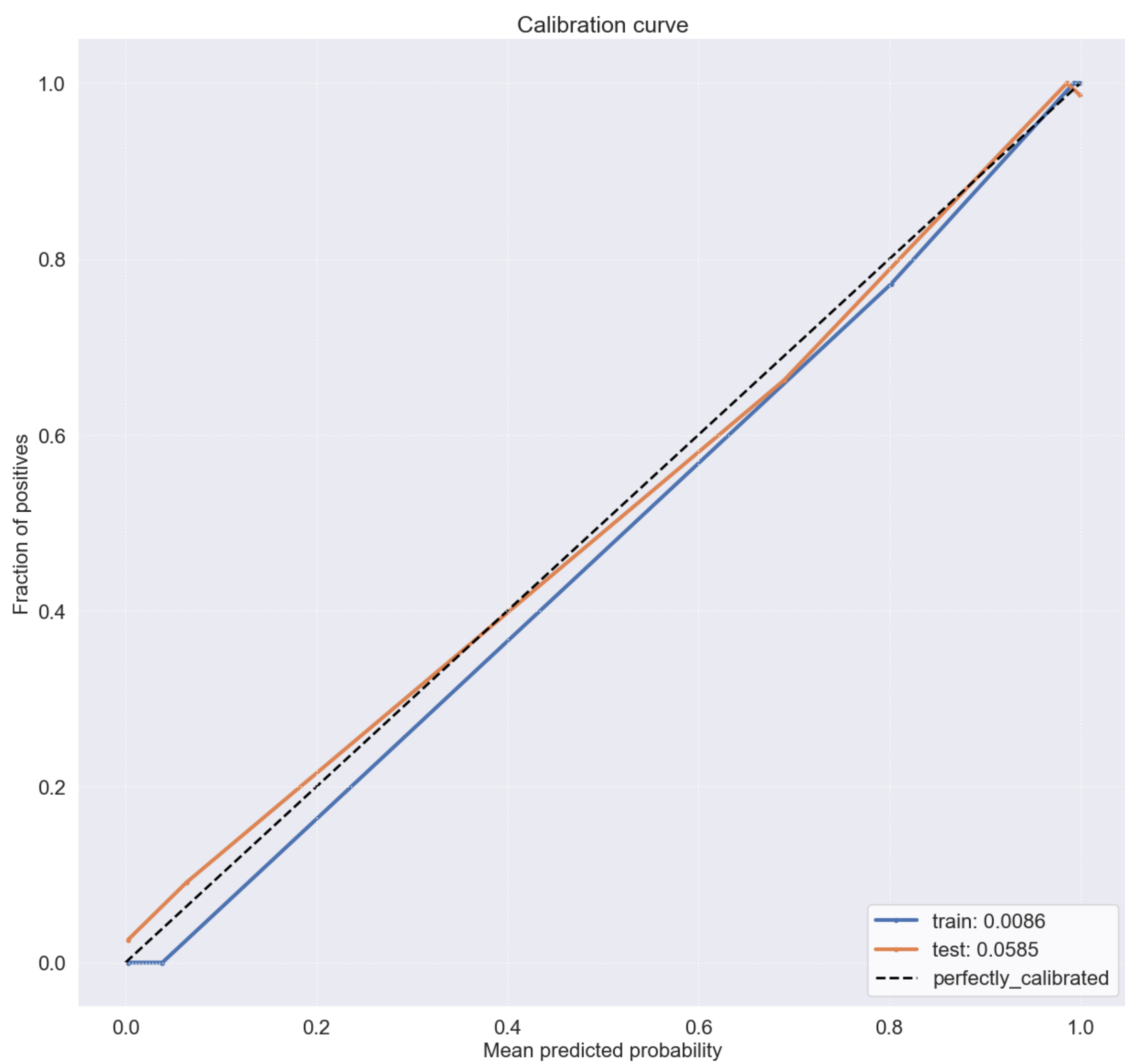
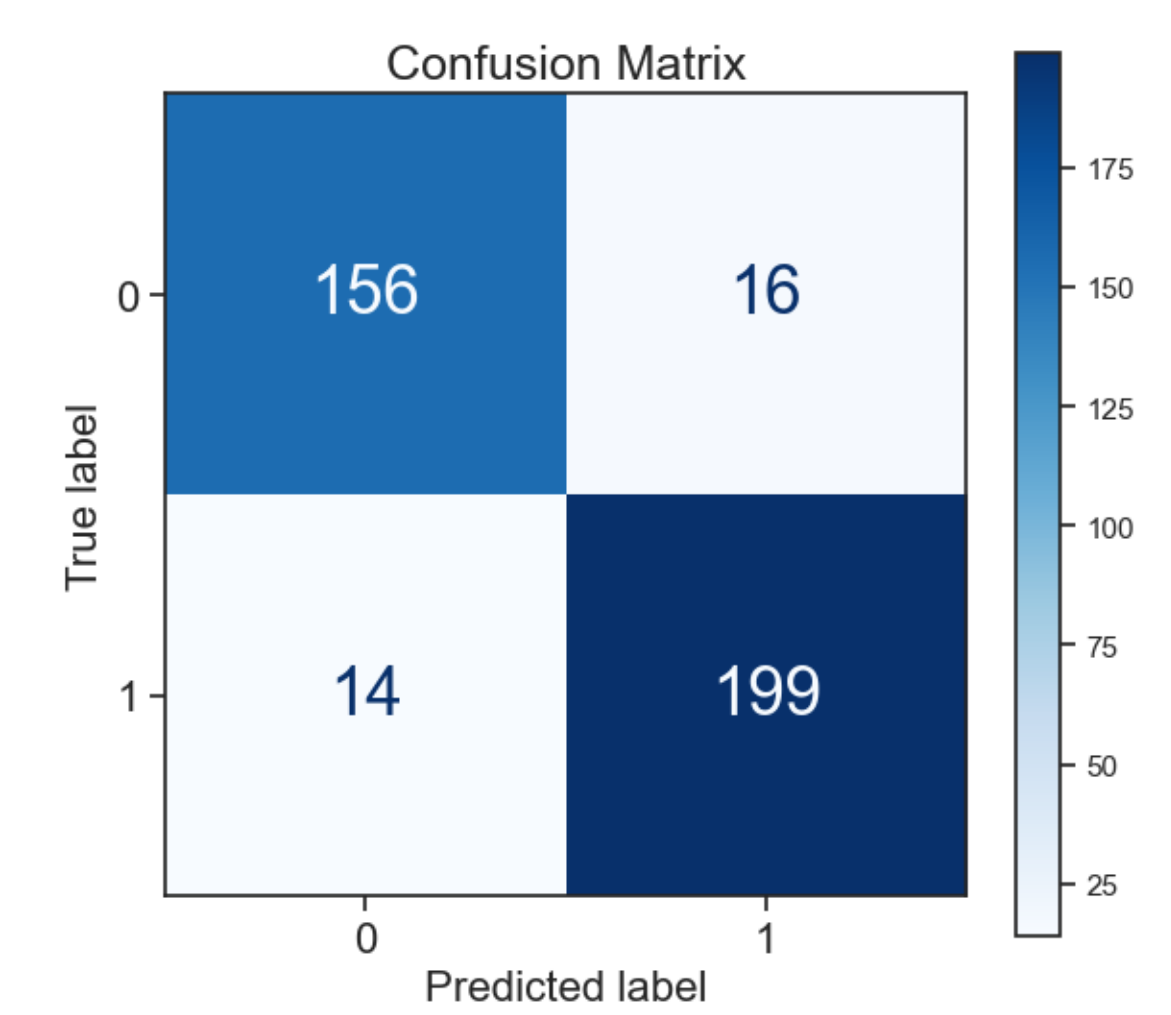


Metric	Train	Test
AUC	0.9954	0.967
accuracy	0.9408	0.8987
balanced accuracy	0.9337	0.8933
recall_(sens)	0.9988	0.9437
specificity	0.8686	0.843
precision	0.9043	0.8816
f1_score	0.9402	0.8981

Protein: P45452 - metric: precision

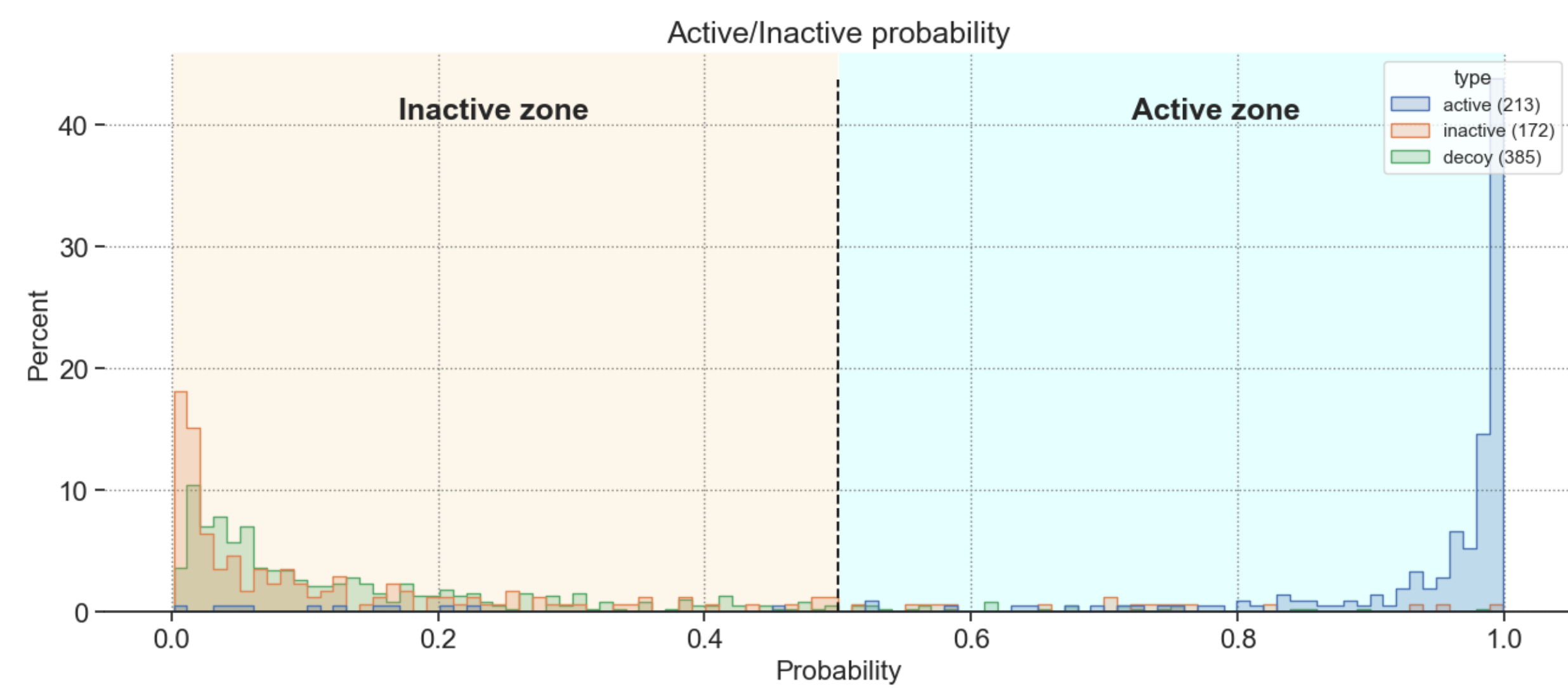
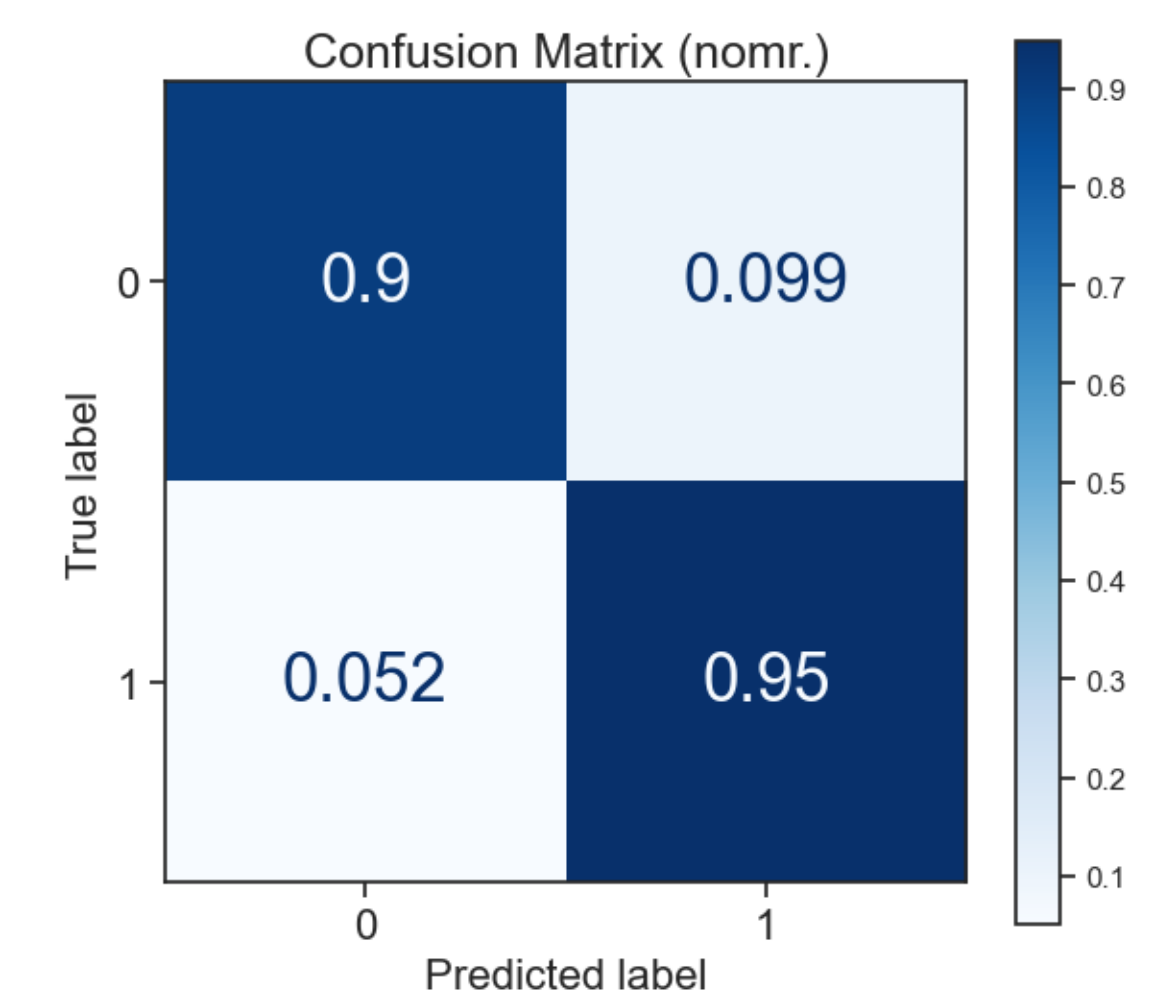
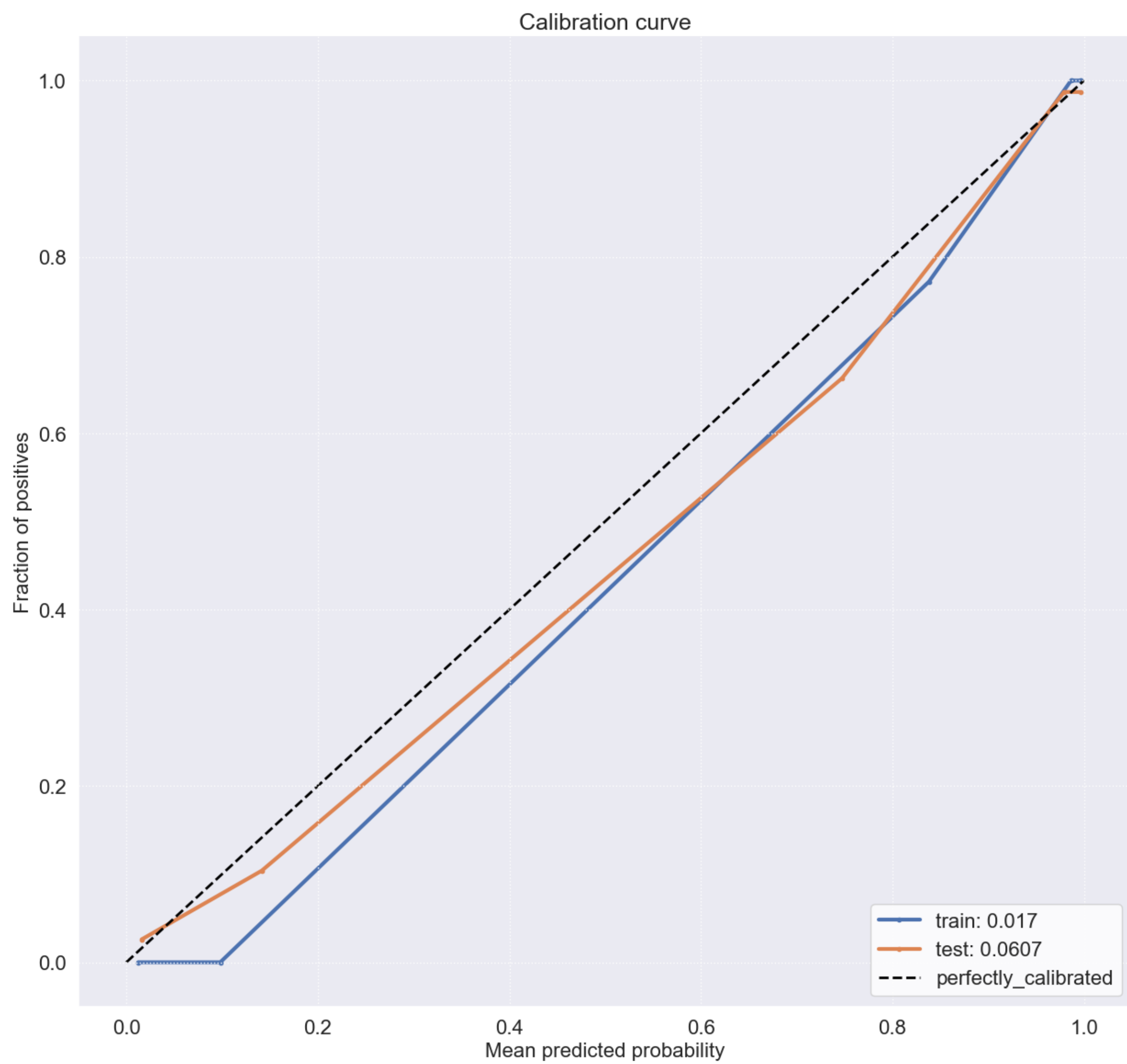
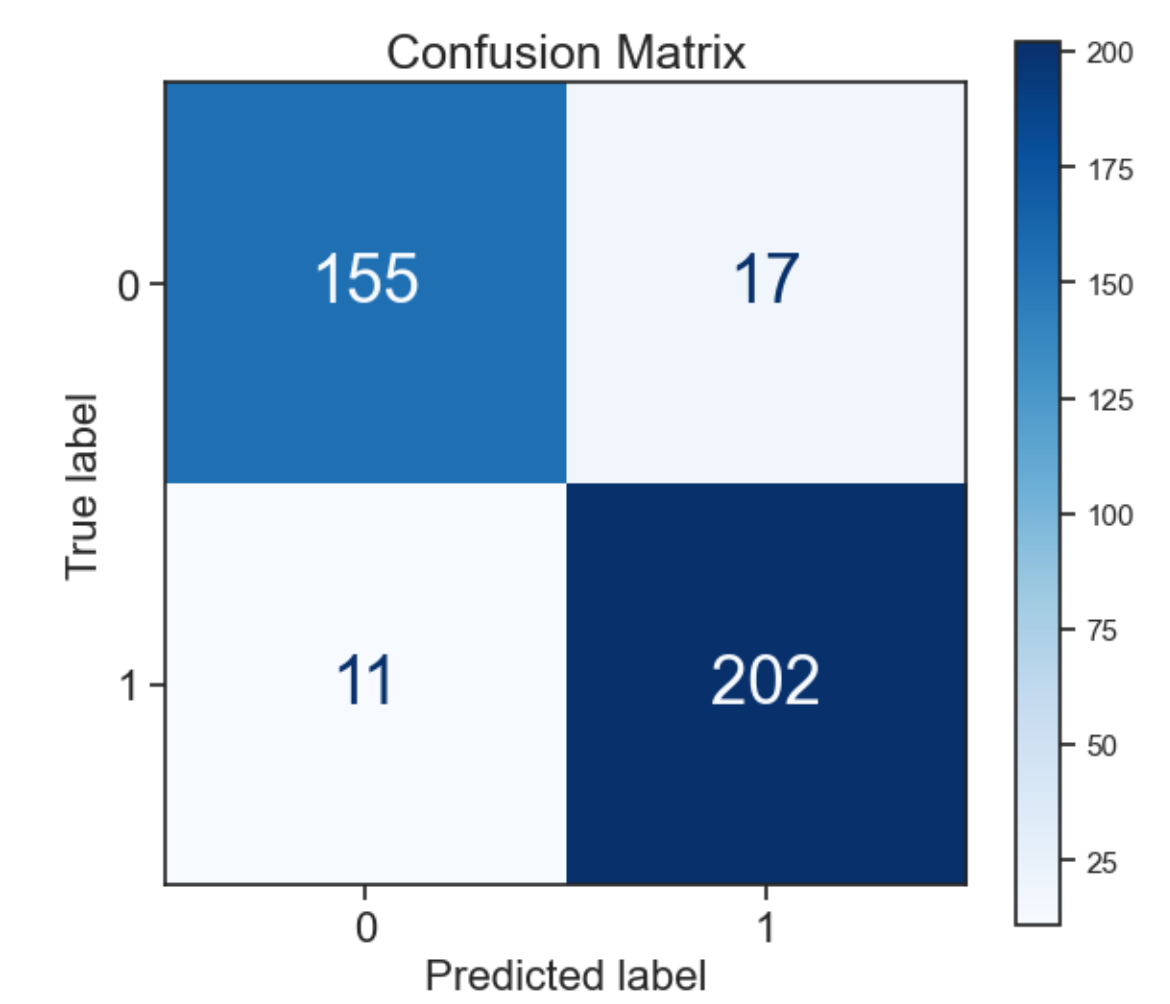
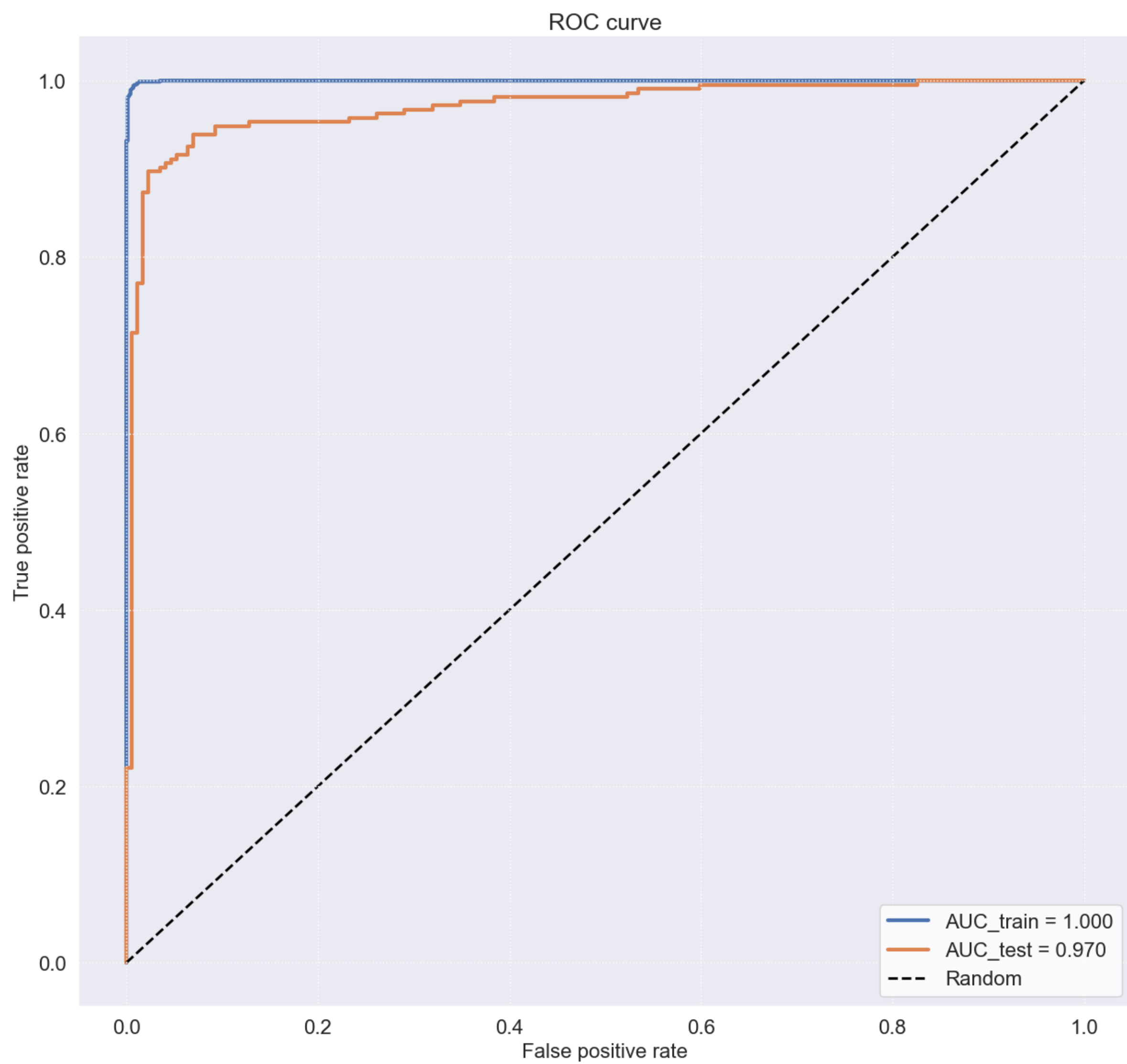
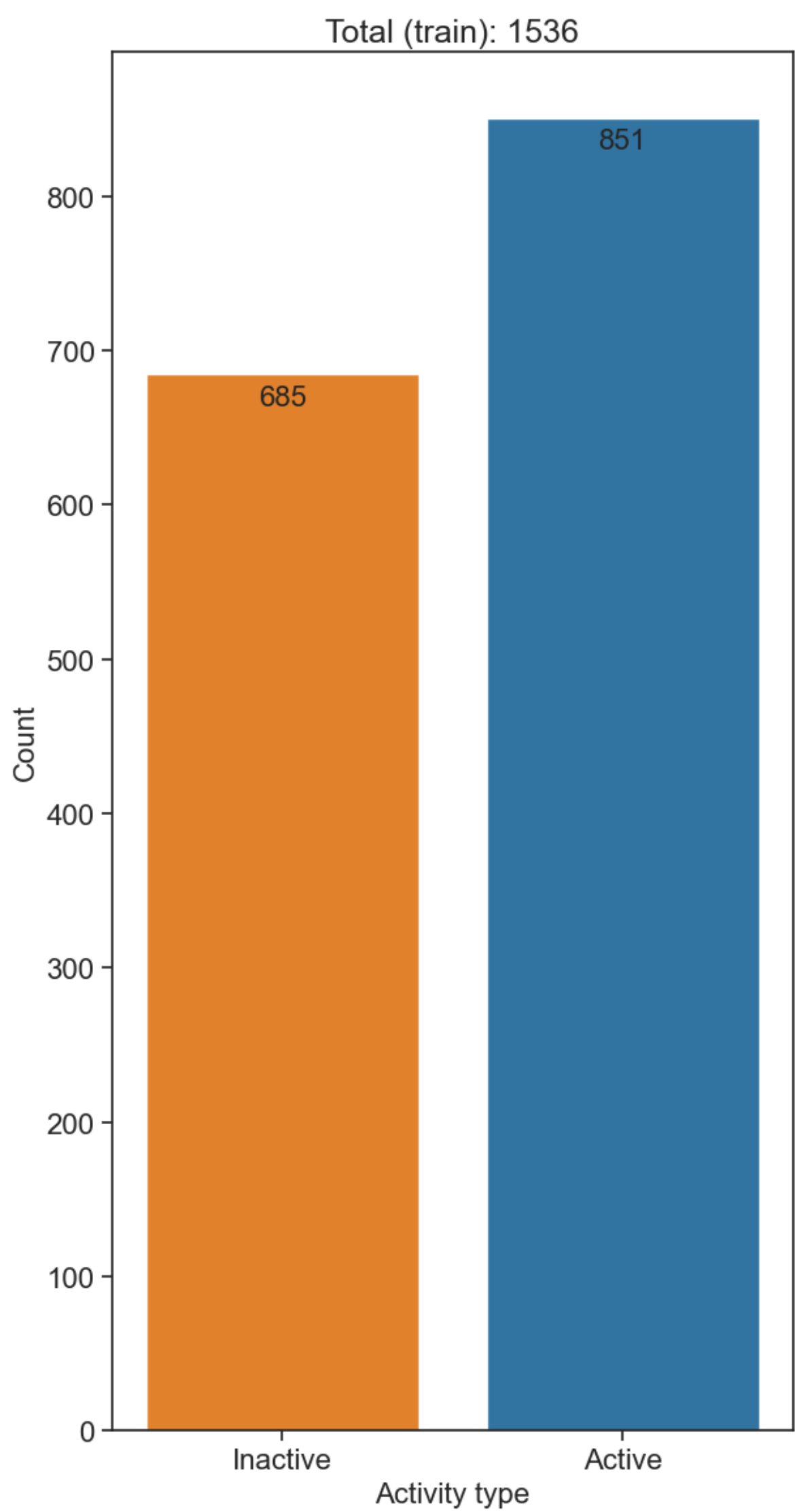


XGBoost Parameters	Value
alpha	3.6113
colsample_bytree	0.5958
gamma	0.0206
lambda	4.7026
learning_rate	0.113
max_depth	9.0
min_child_weight	3.0
n_estimators	516.0
reg_alpha	0.0278
reg_lambda	0.7203
scale_pos_weight	2.1743
subsample	0.9811



Metric	Train	Test
AUC	0.9999	0.9703
accuracy	0.9909	0.9221
balanced accuracy	0.9898	0.9206
recall_(sens)	1.0	0.9343
specificity	0.9796	0.907
precision	0.9838	0.9256
f1_score	0.9909	0.922

Protein: P45452 - metric: SoftVotingXGBoostEnsemble



Metric	Train	Test
AUC	0.9998	0.97
accuracy	0.9805	0.9273
balanced accuracy	0.9781	0.9248
recall_(sens)	1.0	0.9484
specificity	0.9562	0.9012
precision	0.9659	0.9224
f1_score	0.9804	0.9271