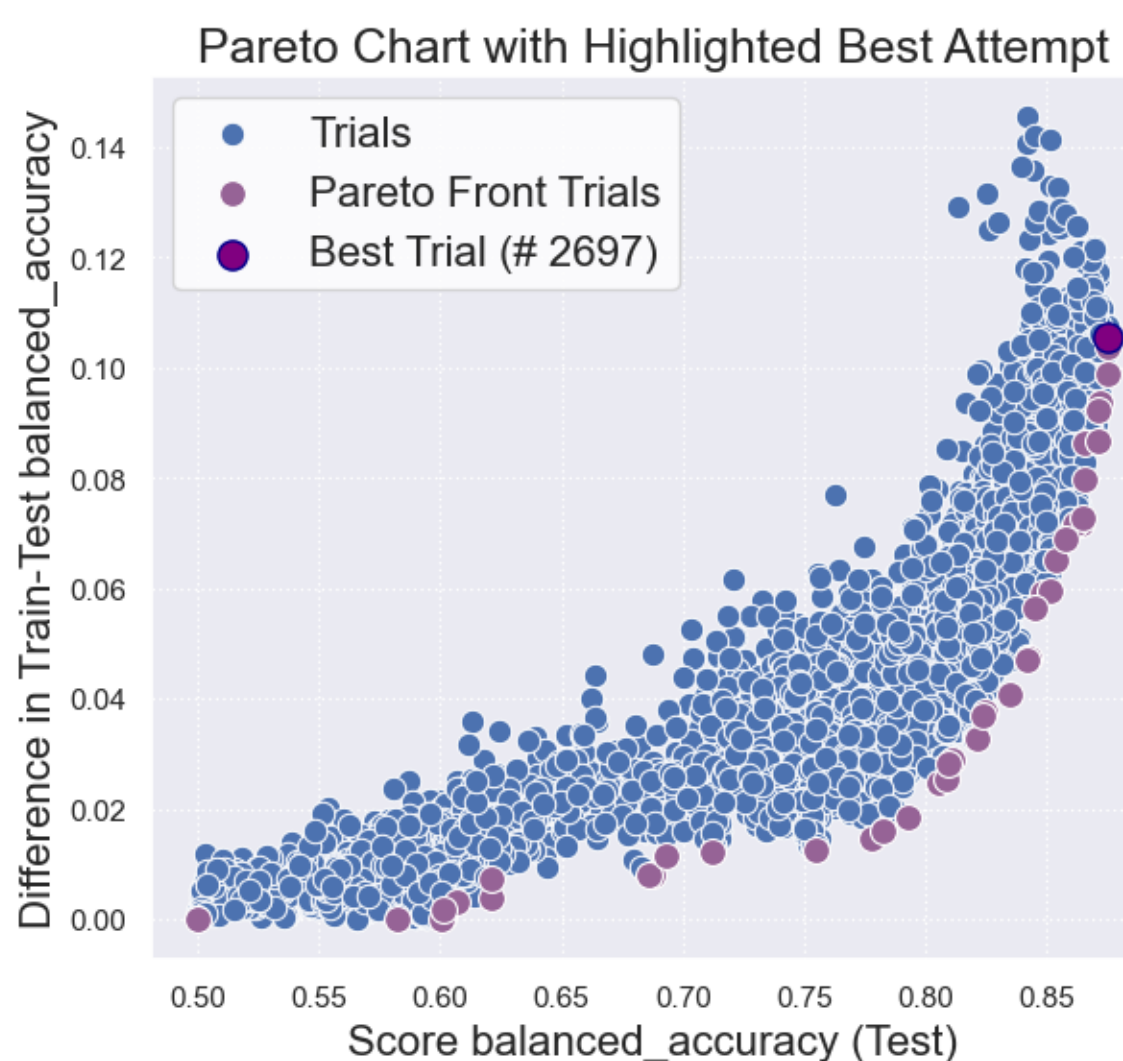
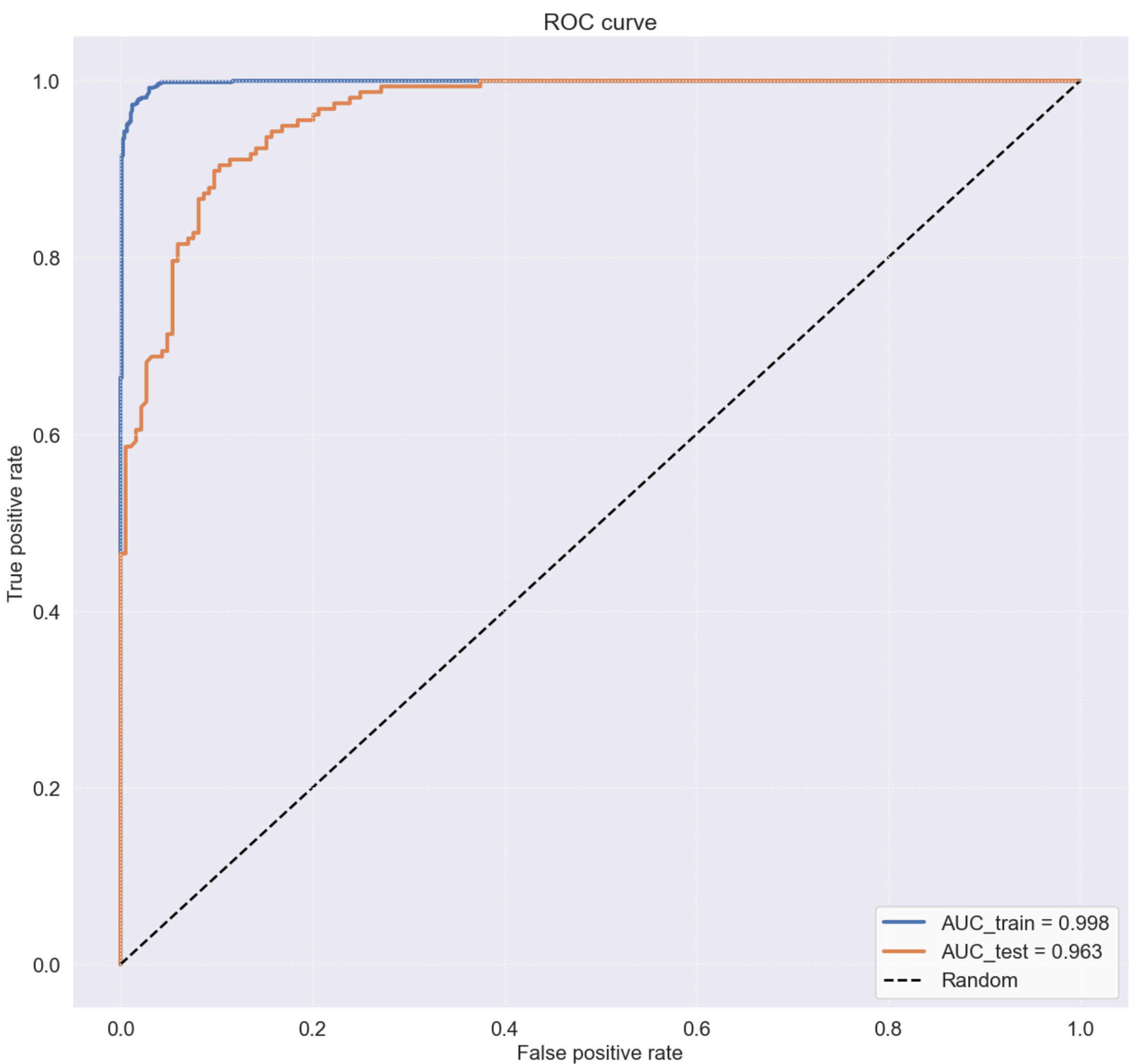
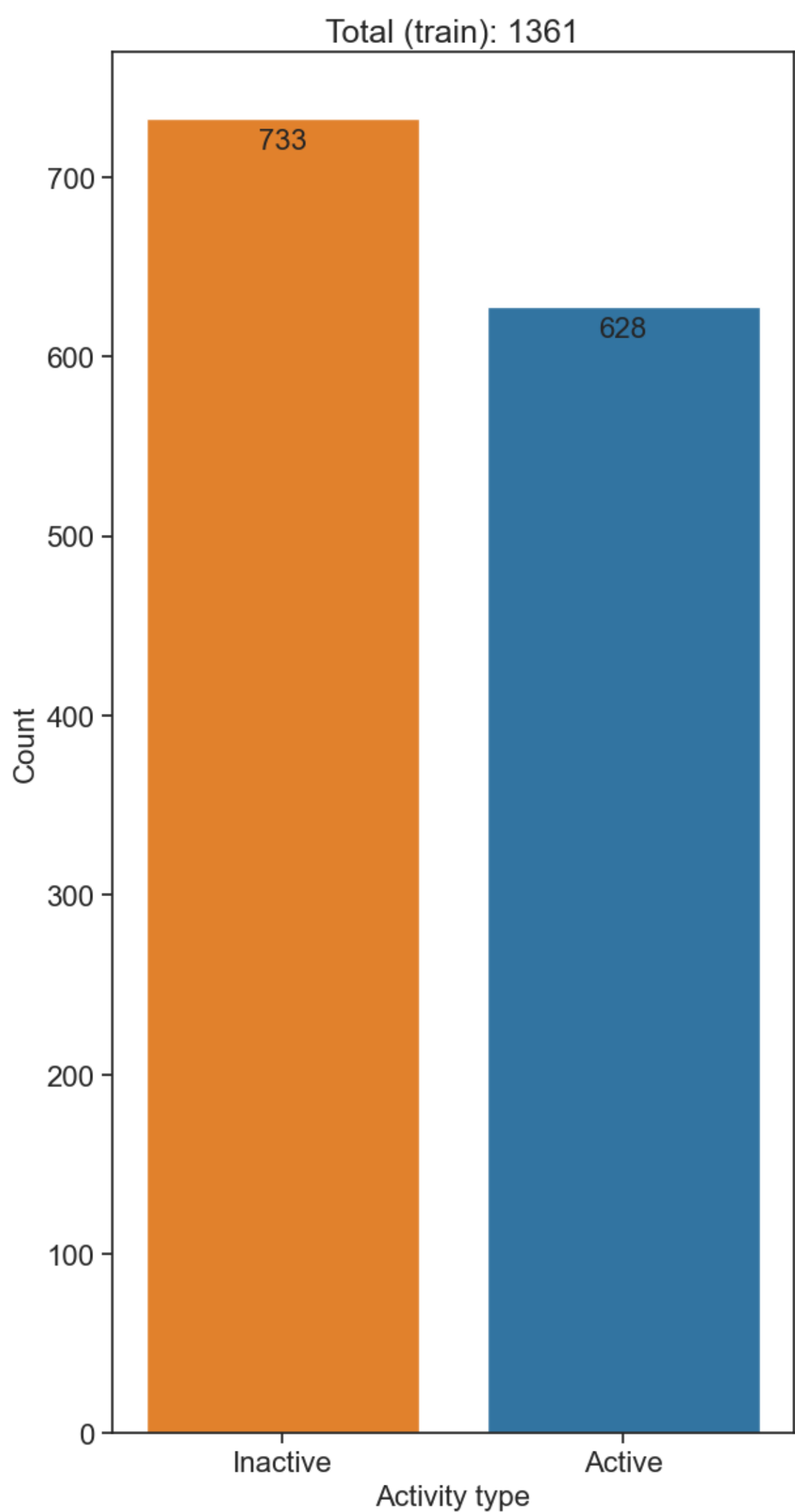
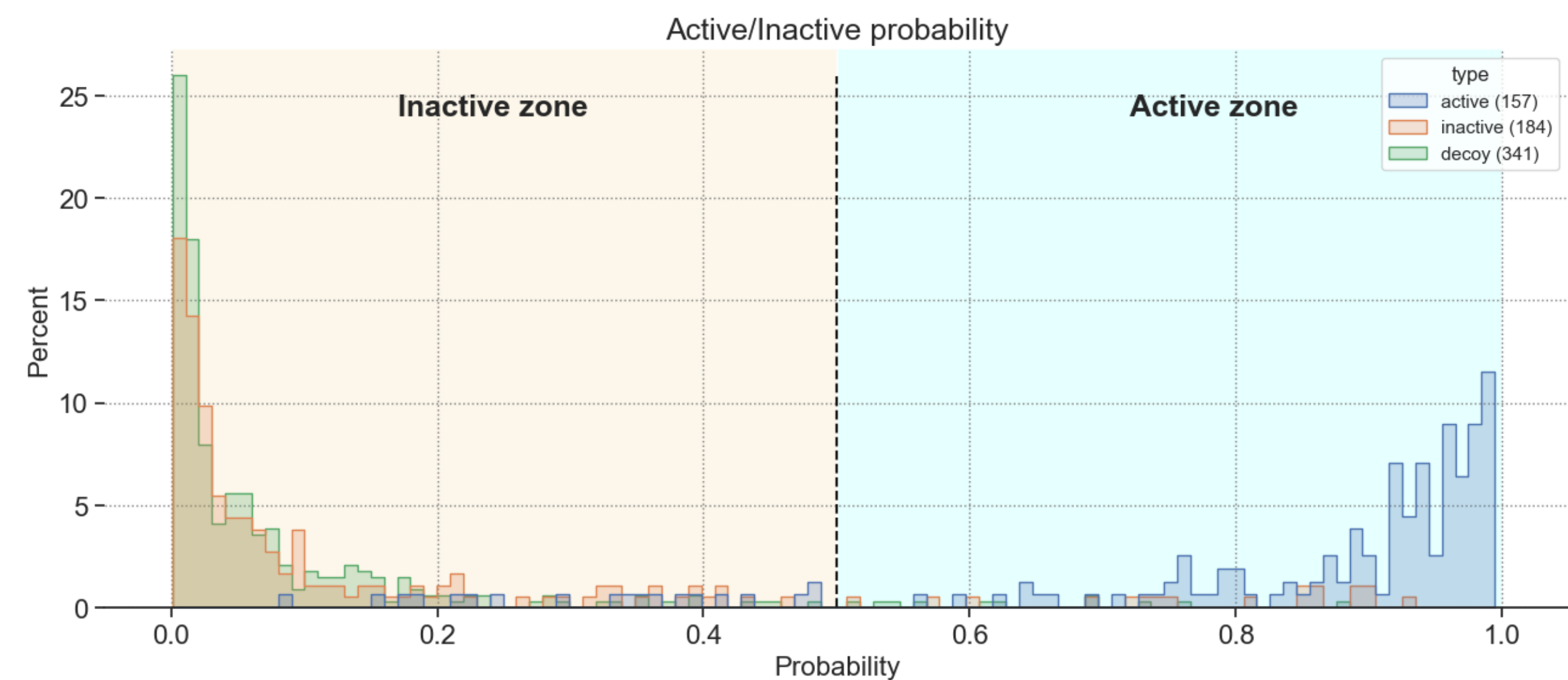
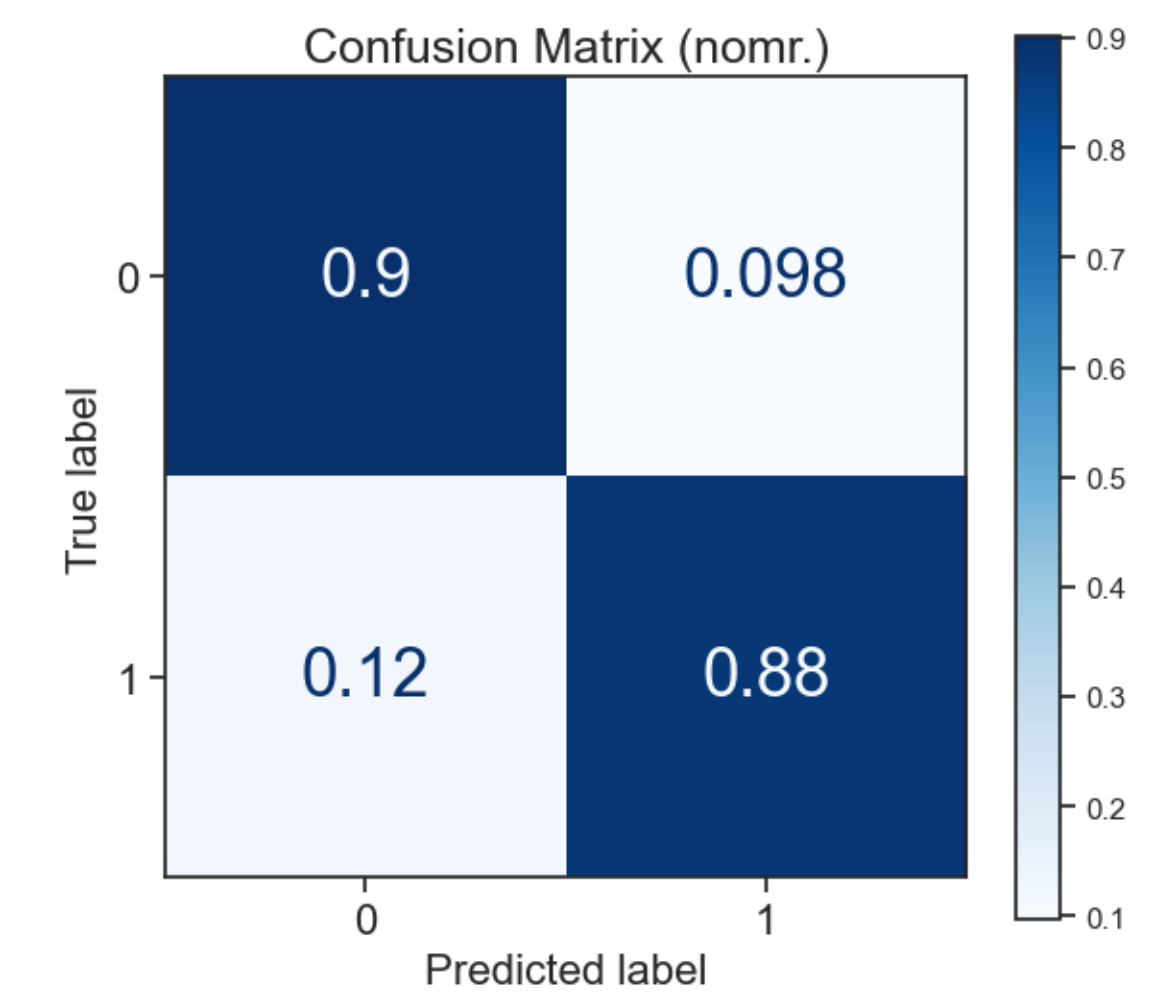
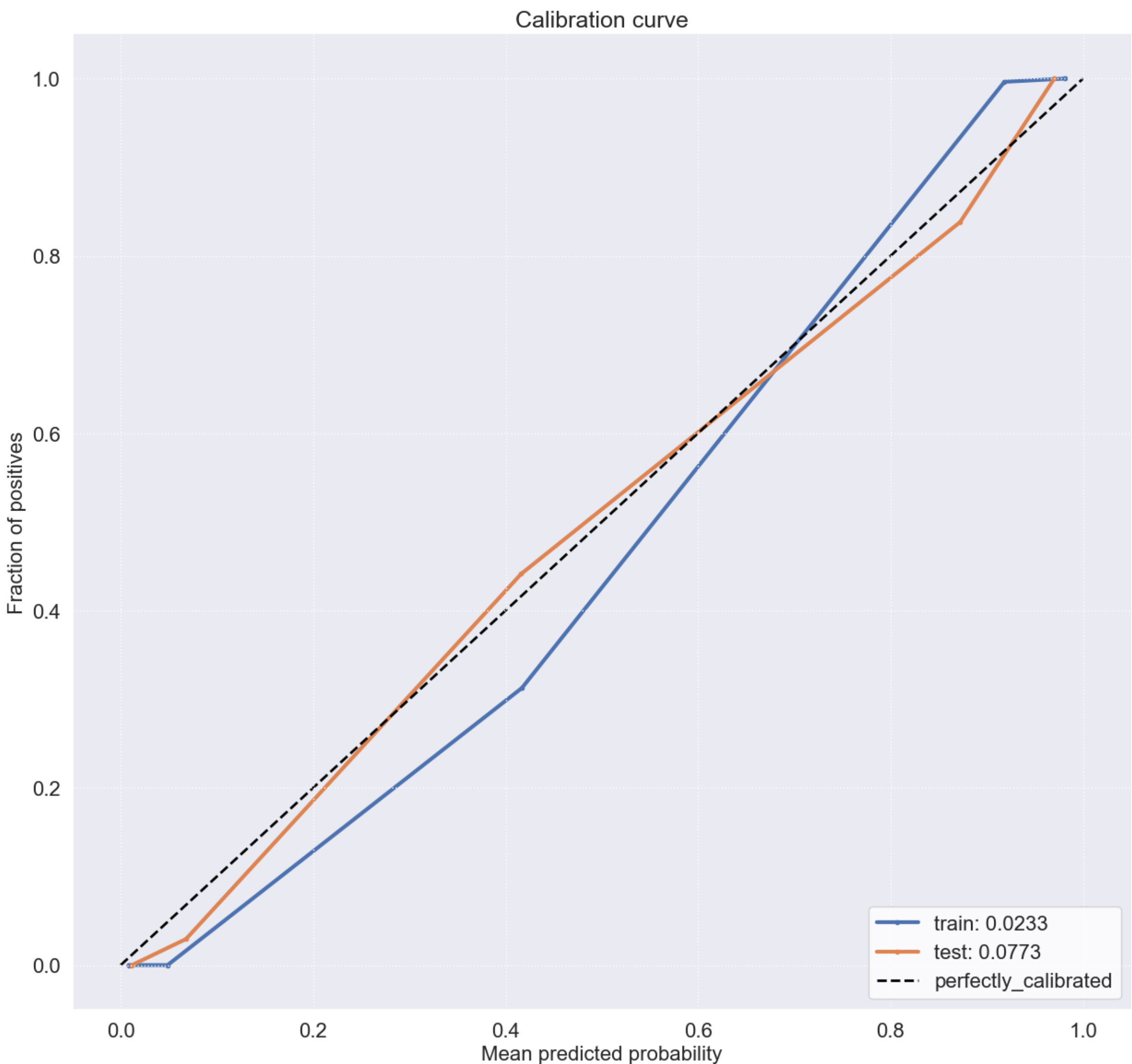
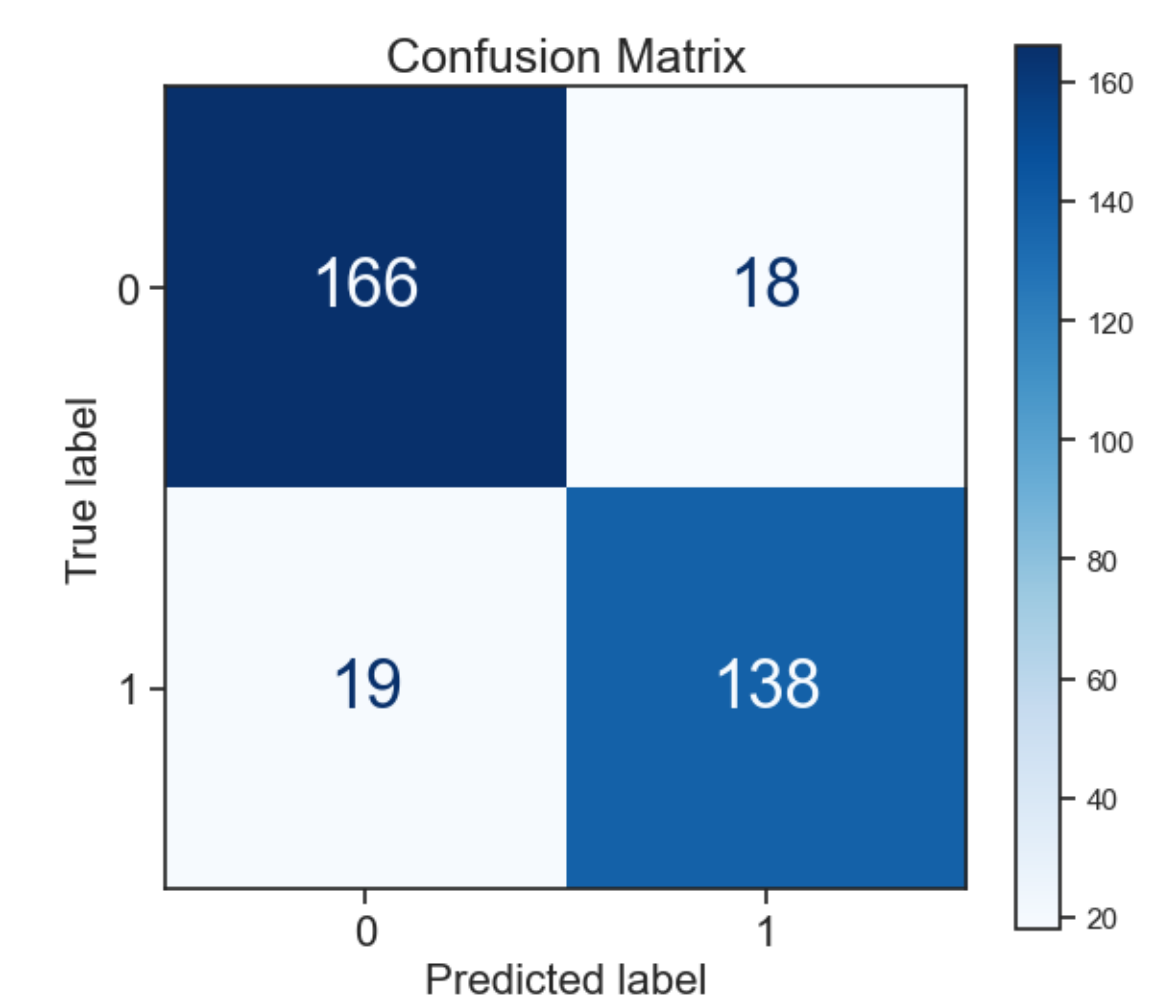


Protein: Q99720 - metric: balanced_accuracy

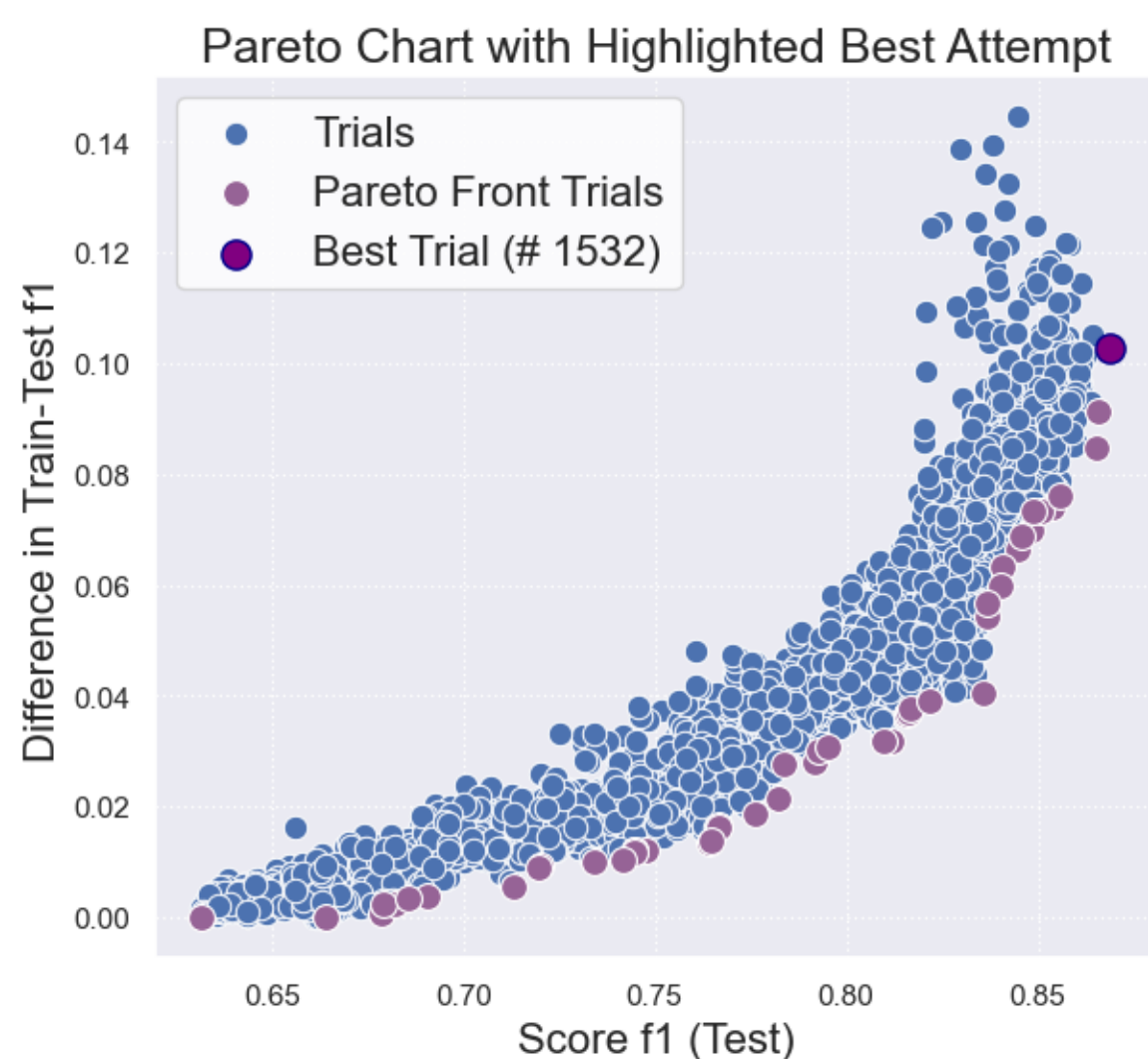
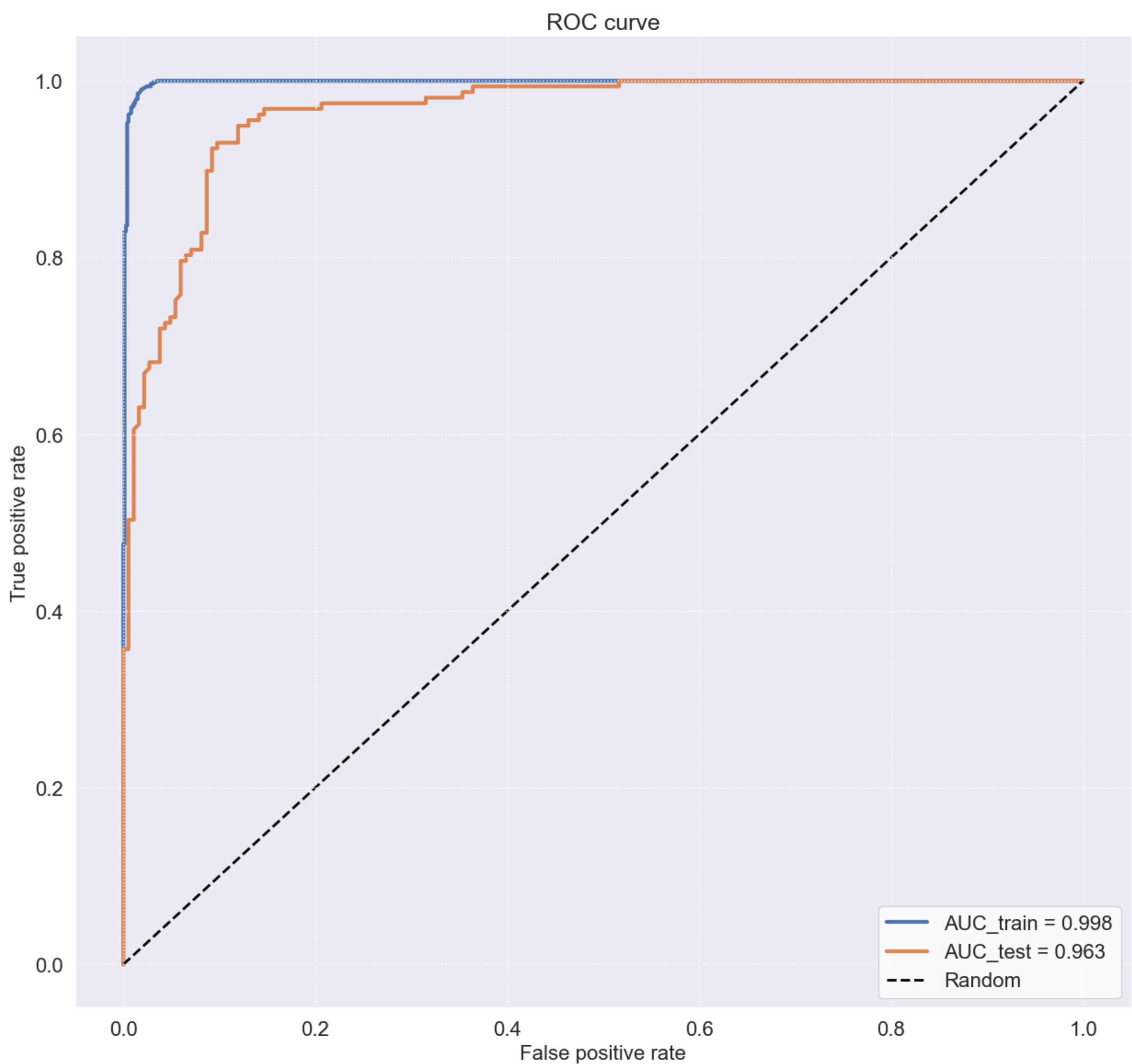
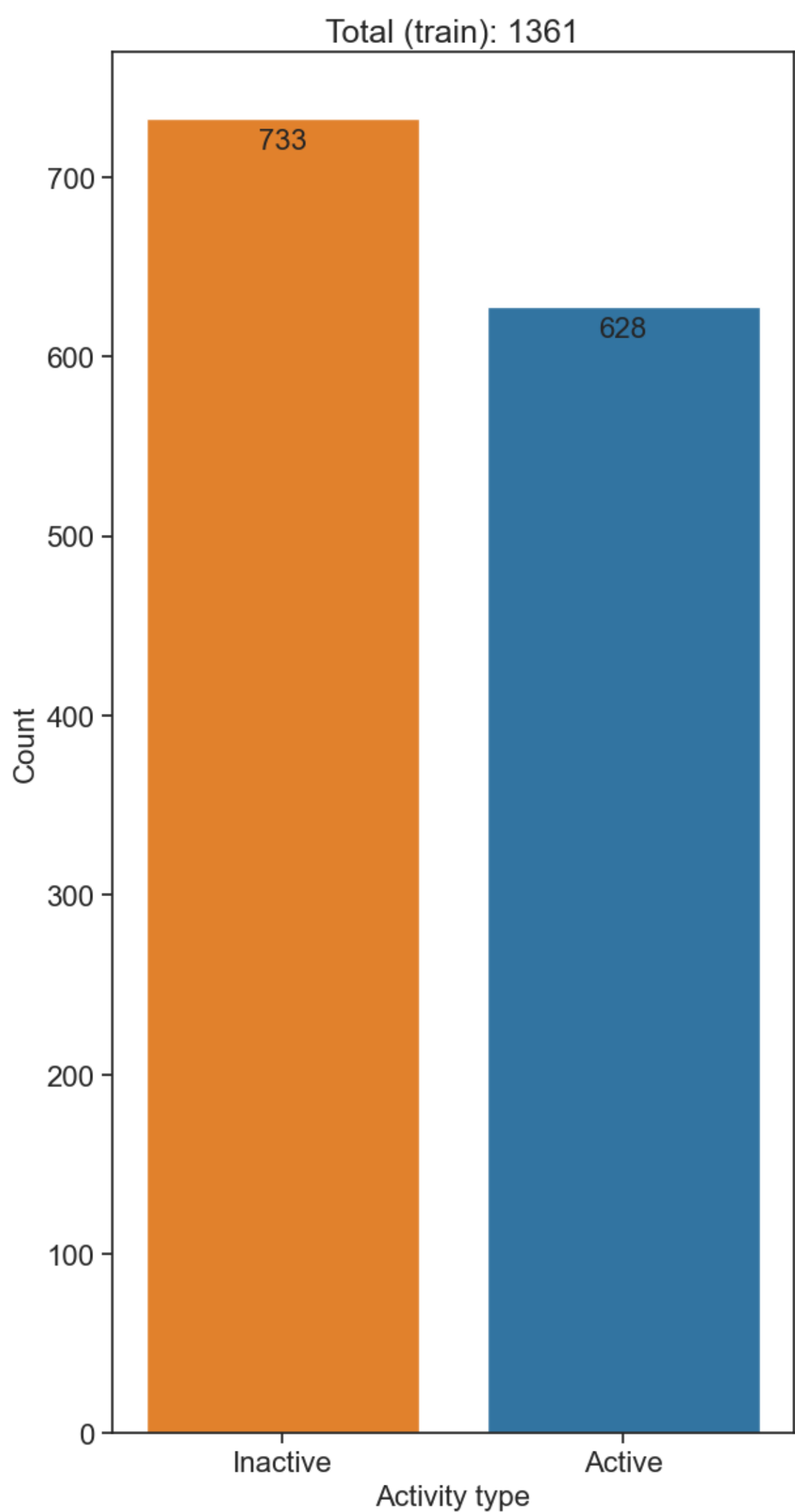


XGBoost Parameters	Value
alpha	1.4641
colsample_bytree	0.5109
gamma	0.0351
lambda	3.2515
learning_rate	0.0427
max_depth	9.0
min_child_weight	1.0
n_estimators	391.0
reg_alpha	0.1709
reg_lambda	0.5251
scale_pos_weight	1.3337
subsample	0.5724

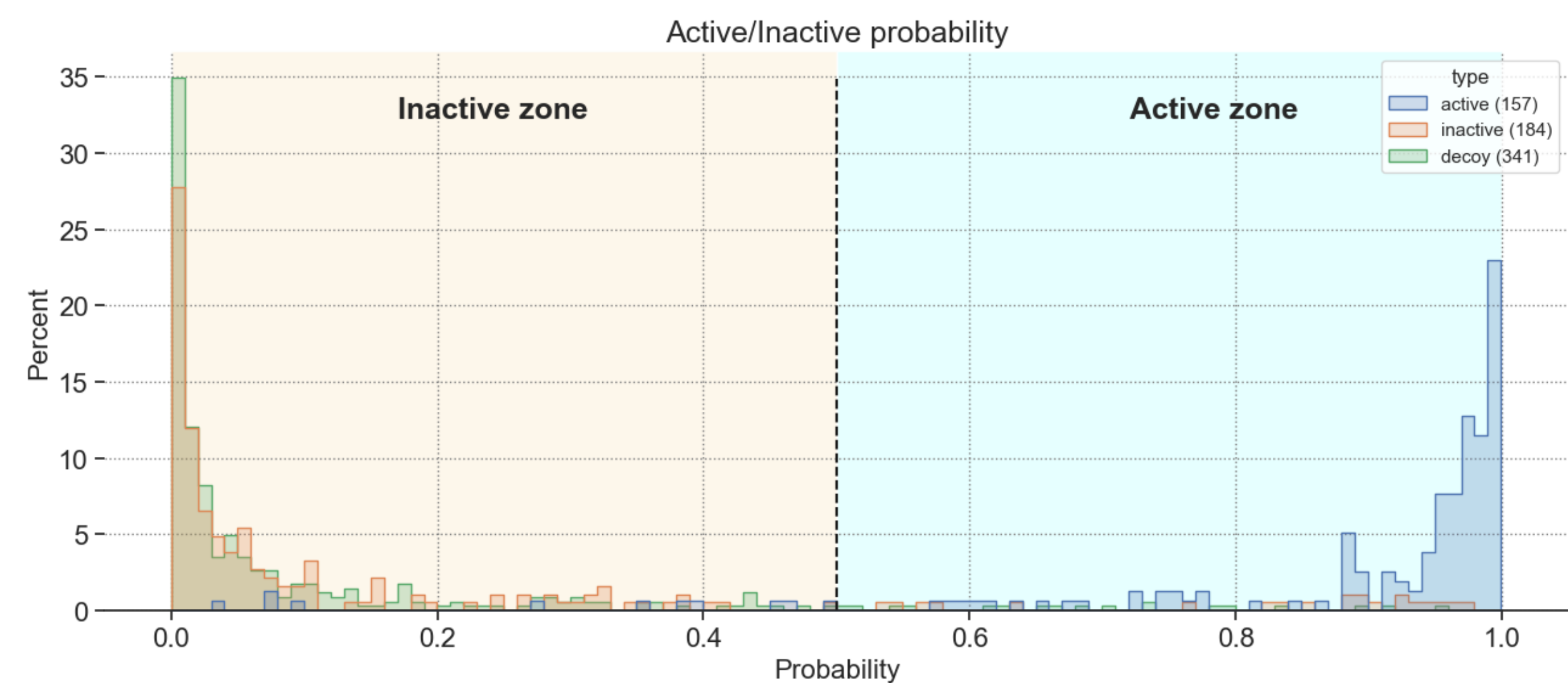
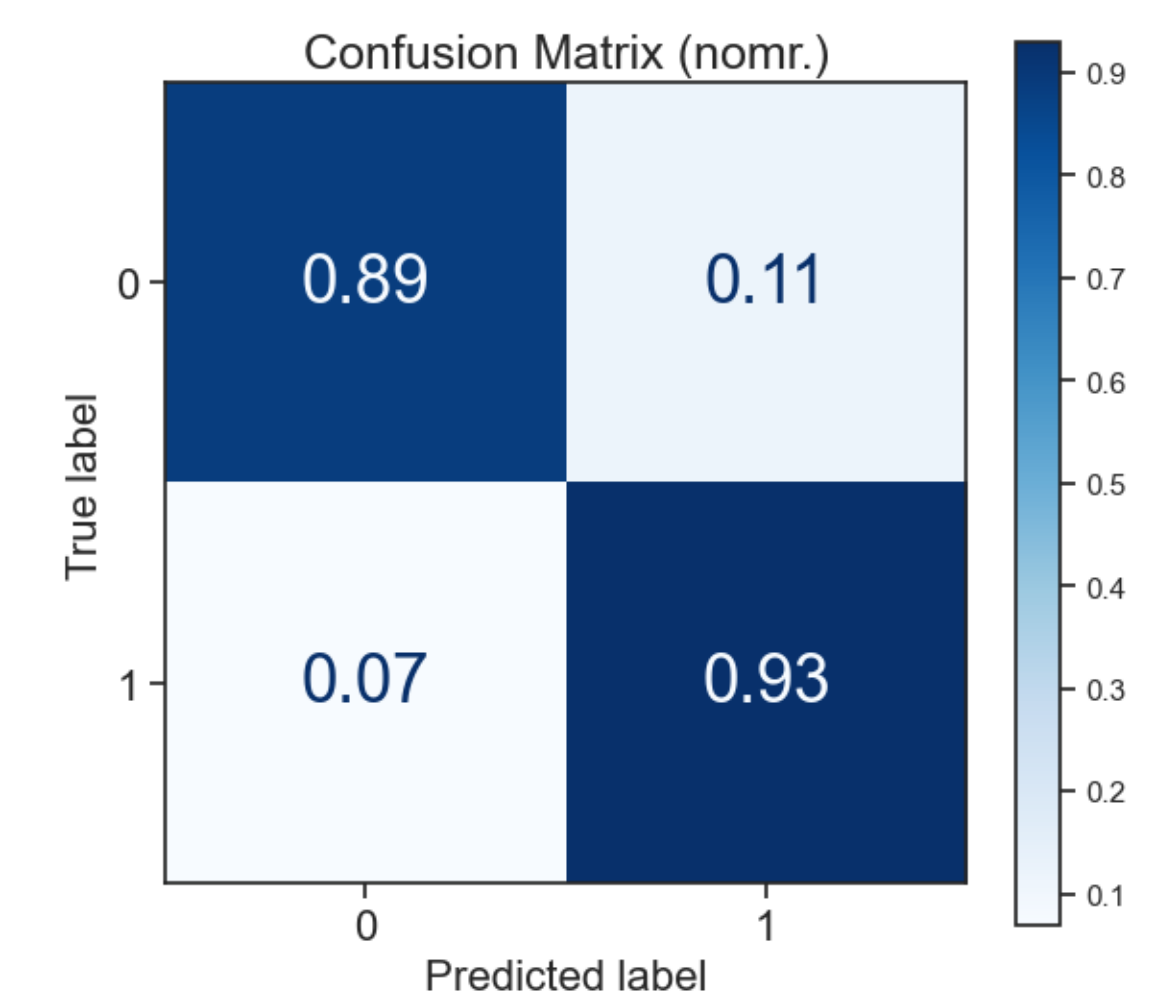
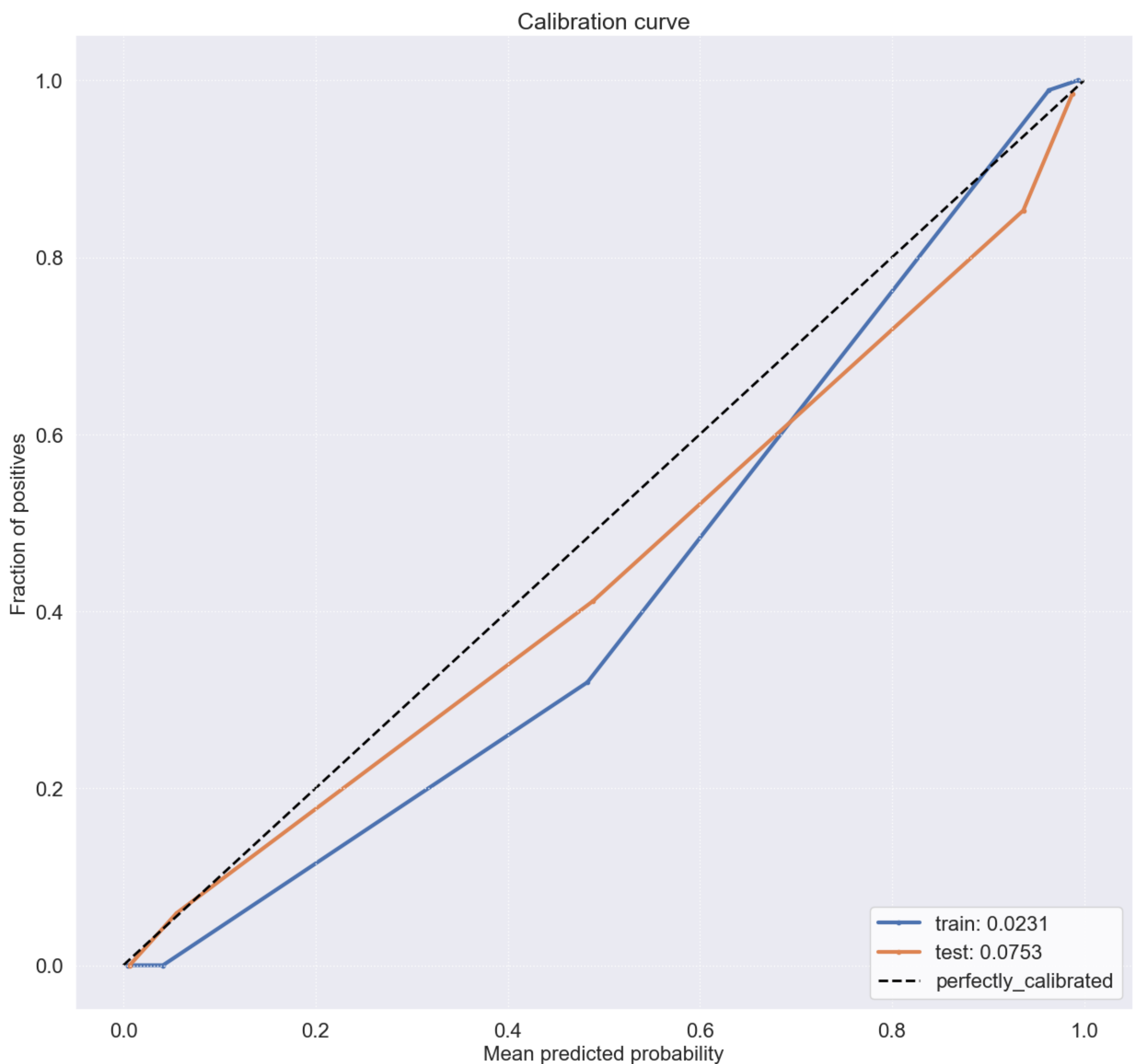
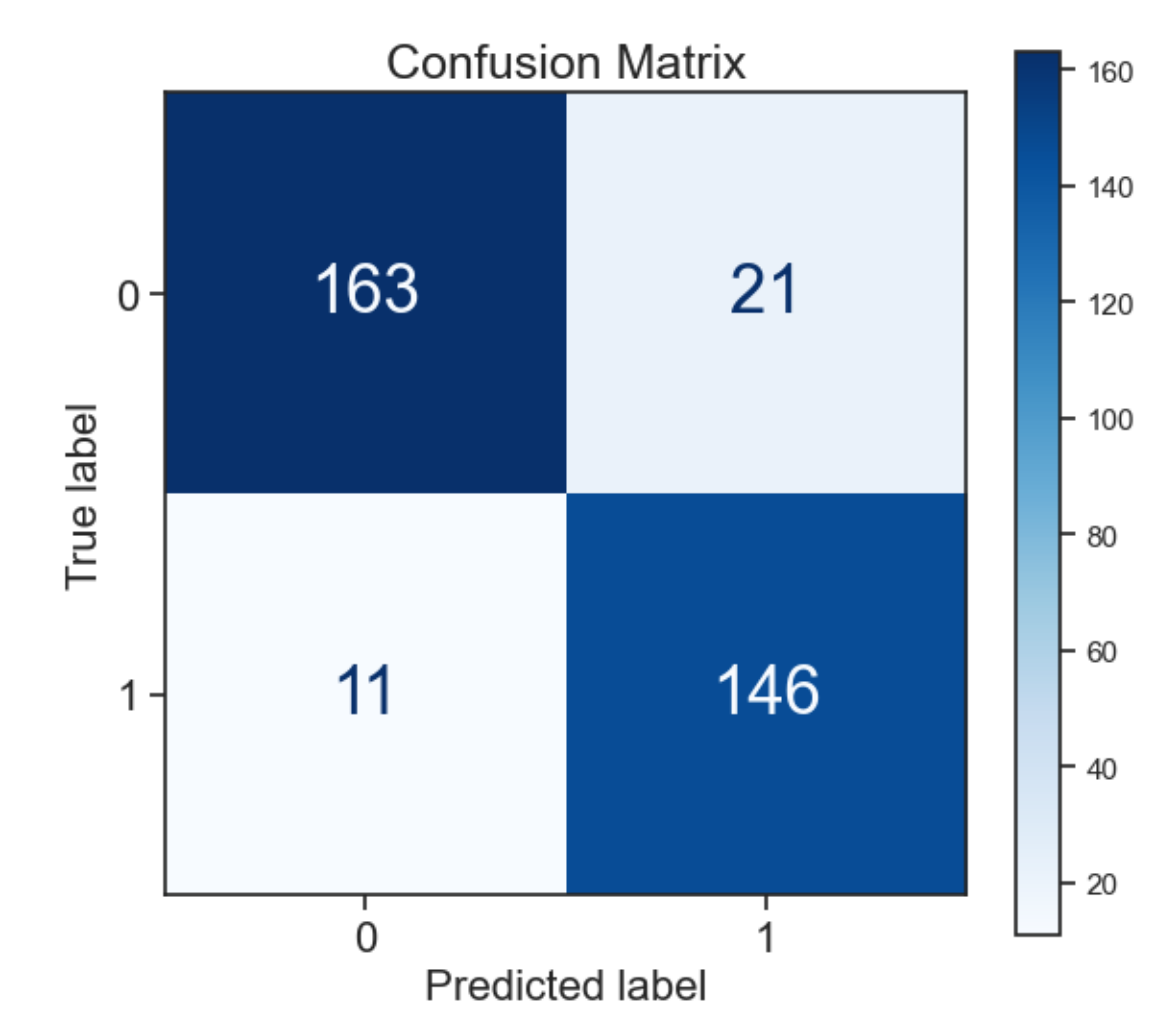


Metric	Train	Test
AUC	0.9984	0.9634
accuracy	0.9794	0.8915
balanced accuracy	0.9803	0.8906
recall_(sens)	0.992	0.879
specificity	0.9686	0.9022
precision	0.9644	0.8846
f1_score	0.9794	0.8915

Protein: Q99720 - metric: f1

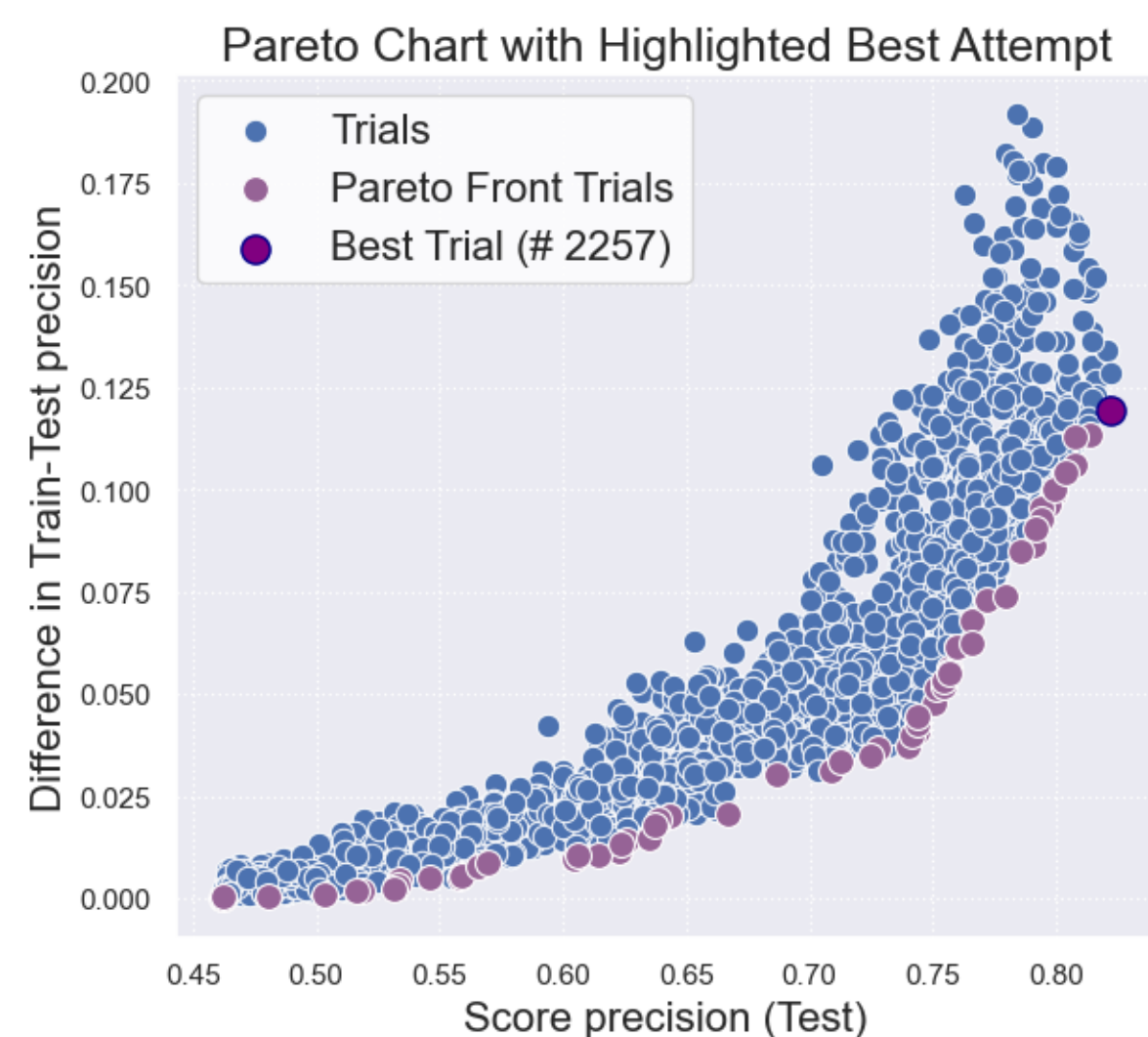
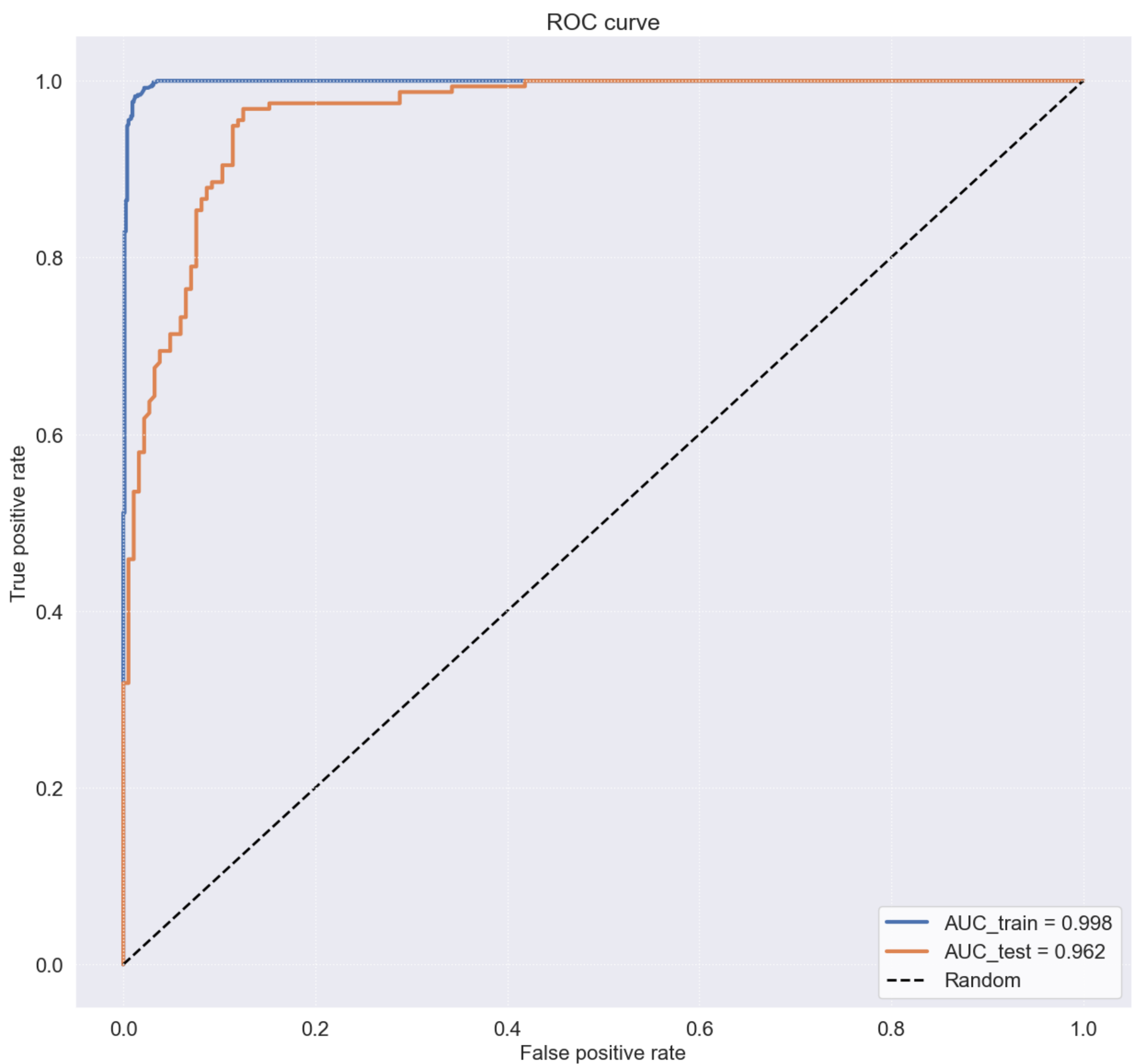
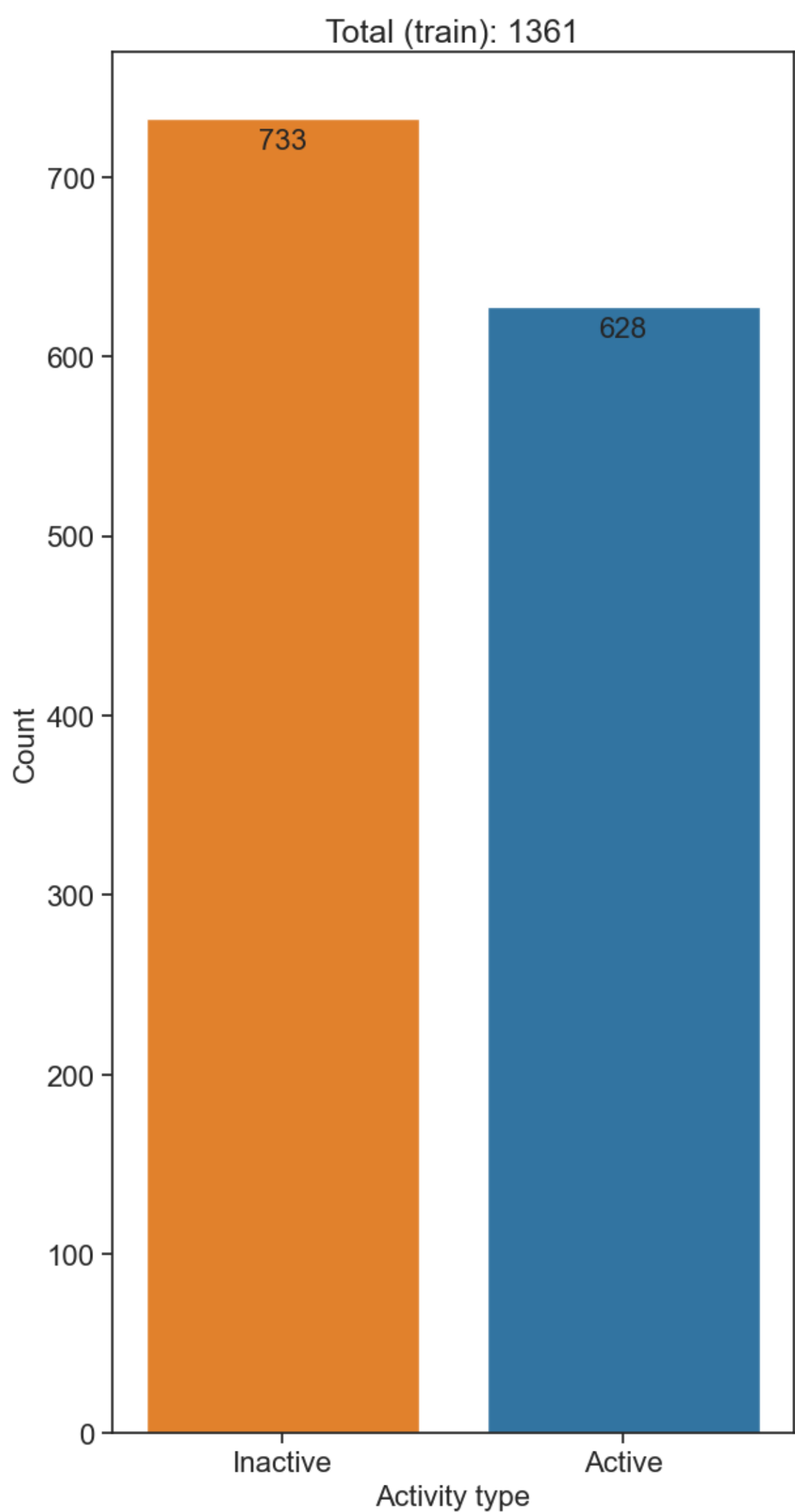


XGBoost Parameters	Value
alpha	4.9389
colsample_bytree	0.5707
gamma	0.261
lambda	4.9227
learning_rate	0.0742
max_depth	8.0
min_child_weight	3.0
n_estimators	954.0
reg_alpha	0.103
reg_lambda	0.9776
scale_pos_weight	2.9636
subsample	0.9576

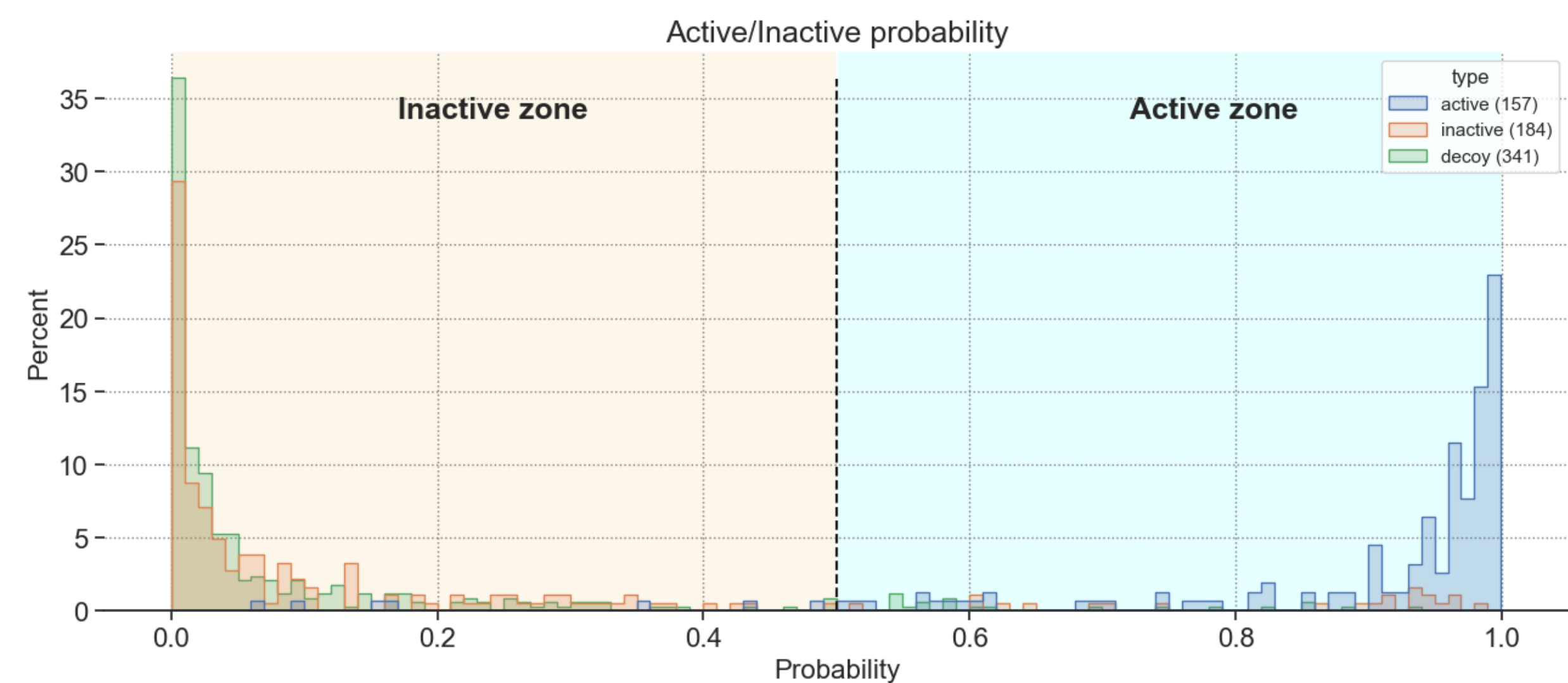
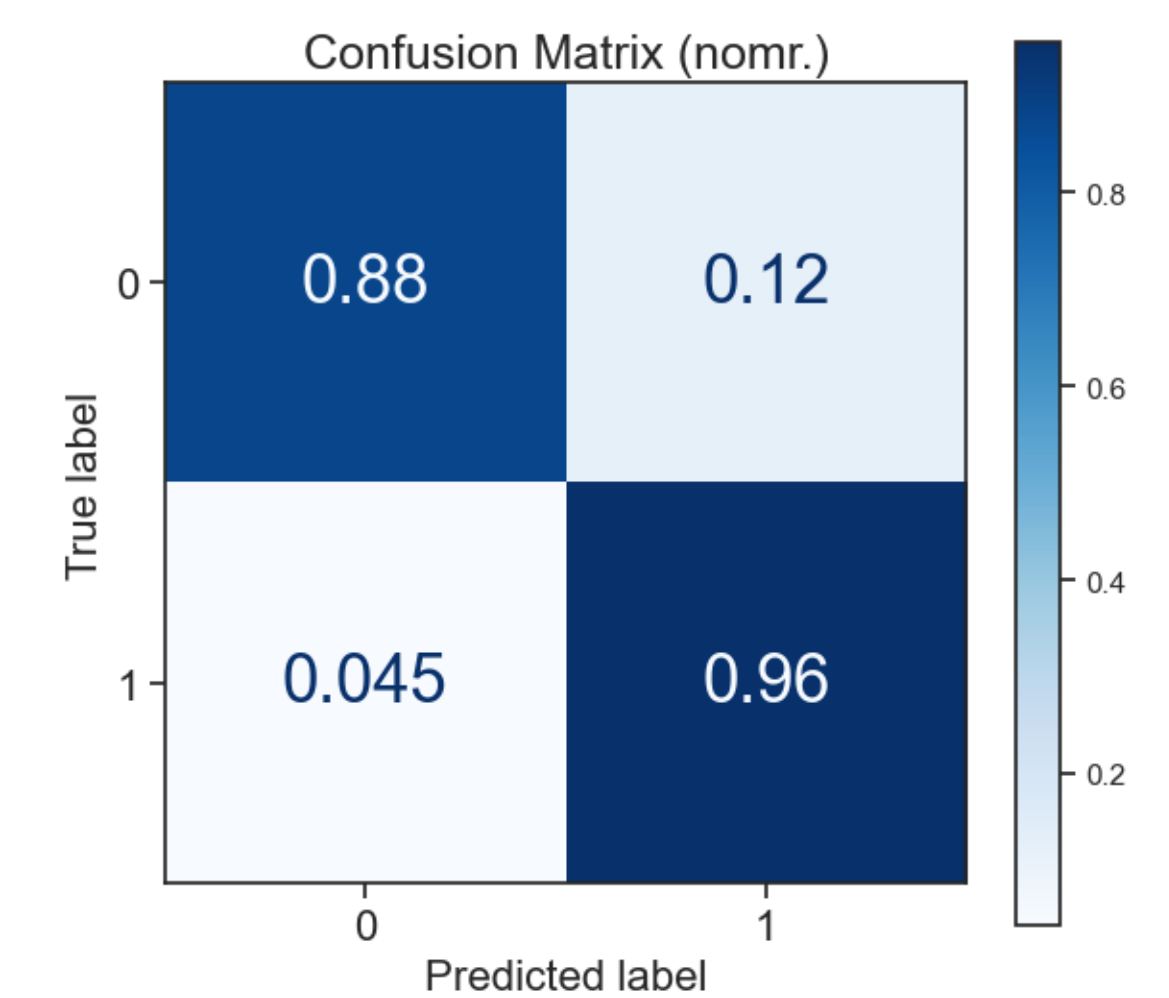
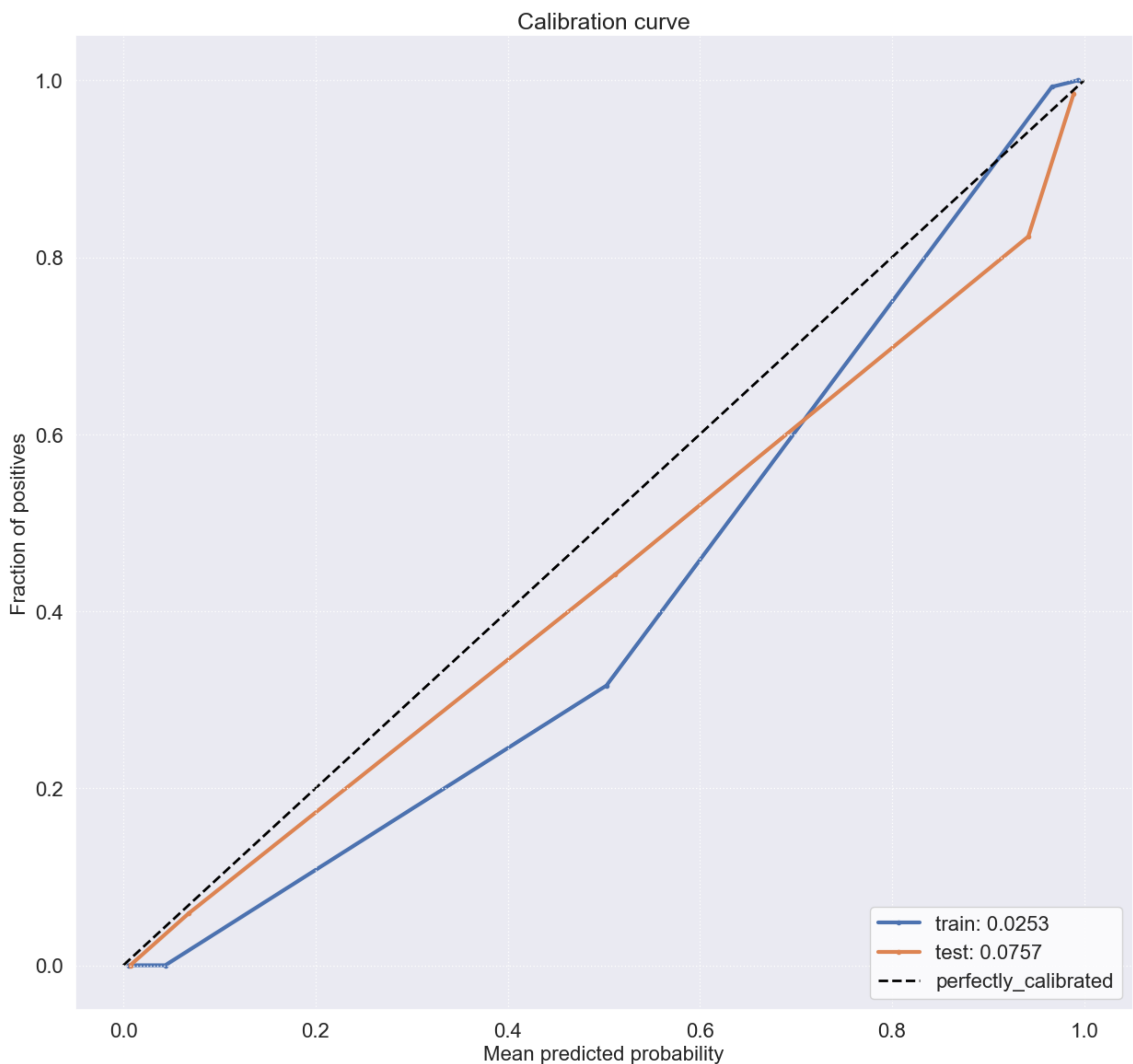
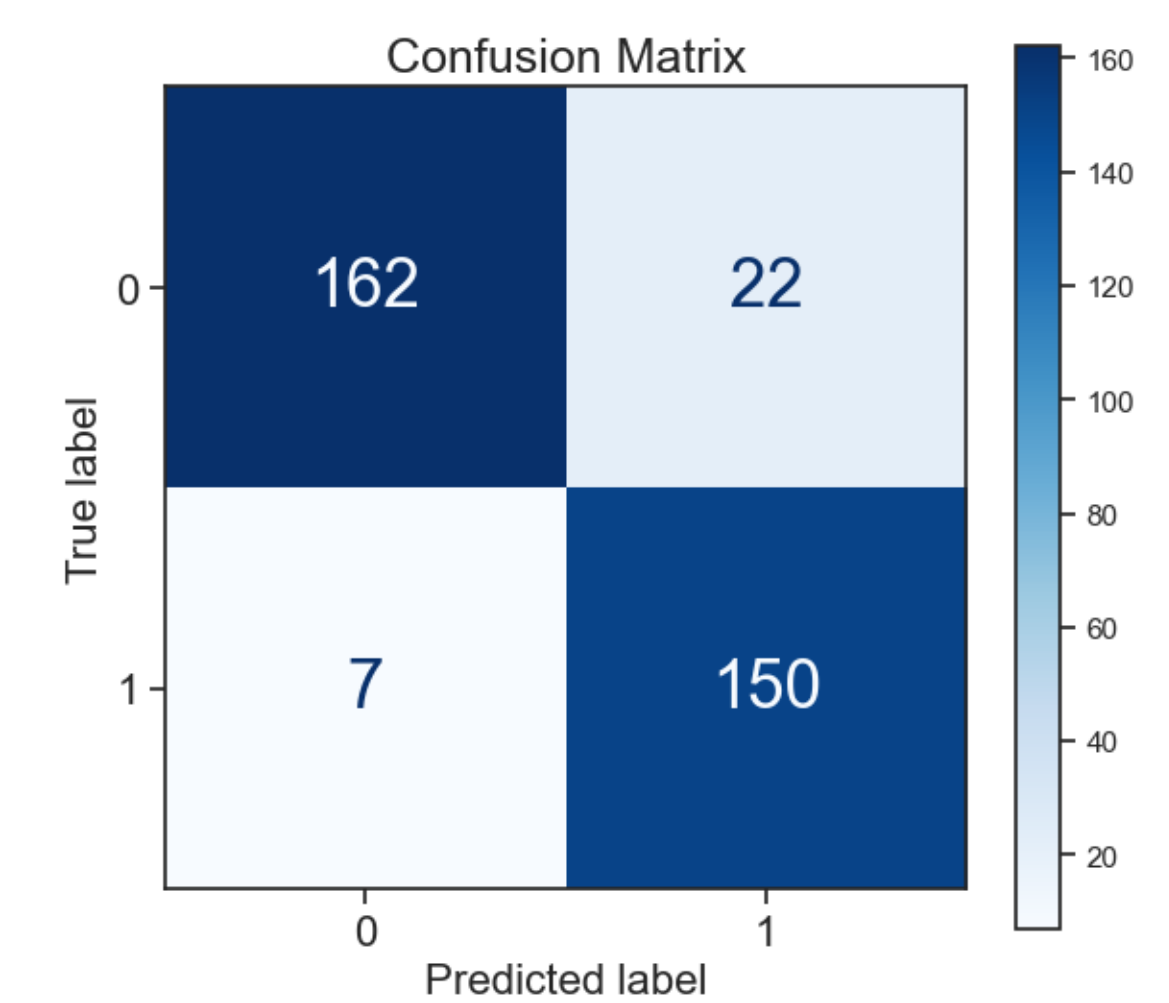


Metric	Train	Test
AUC	0.9984	0.9632
accuracy	0.9728	0.9062
balanced accuracy	0.9748	0.9079
recall_(sens)	1.0	0.9299
specificity	0.9495	0.8859
precision	0.9444	0.8743
f1_score	0.9729	0.9063

Protein: Q99720 - metric: precision

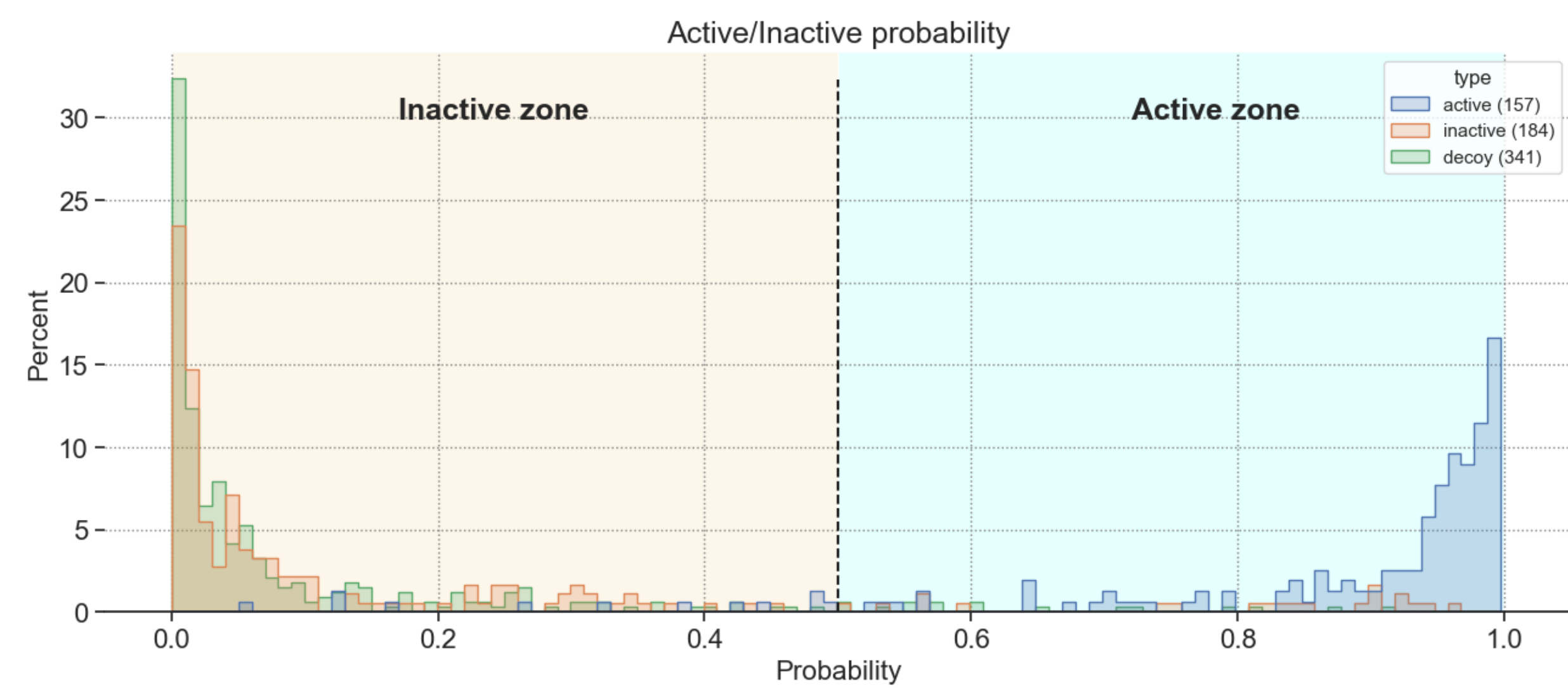
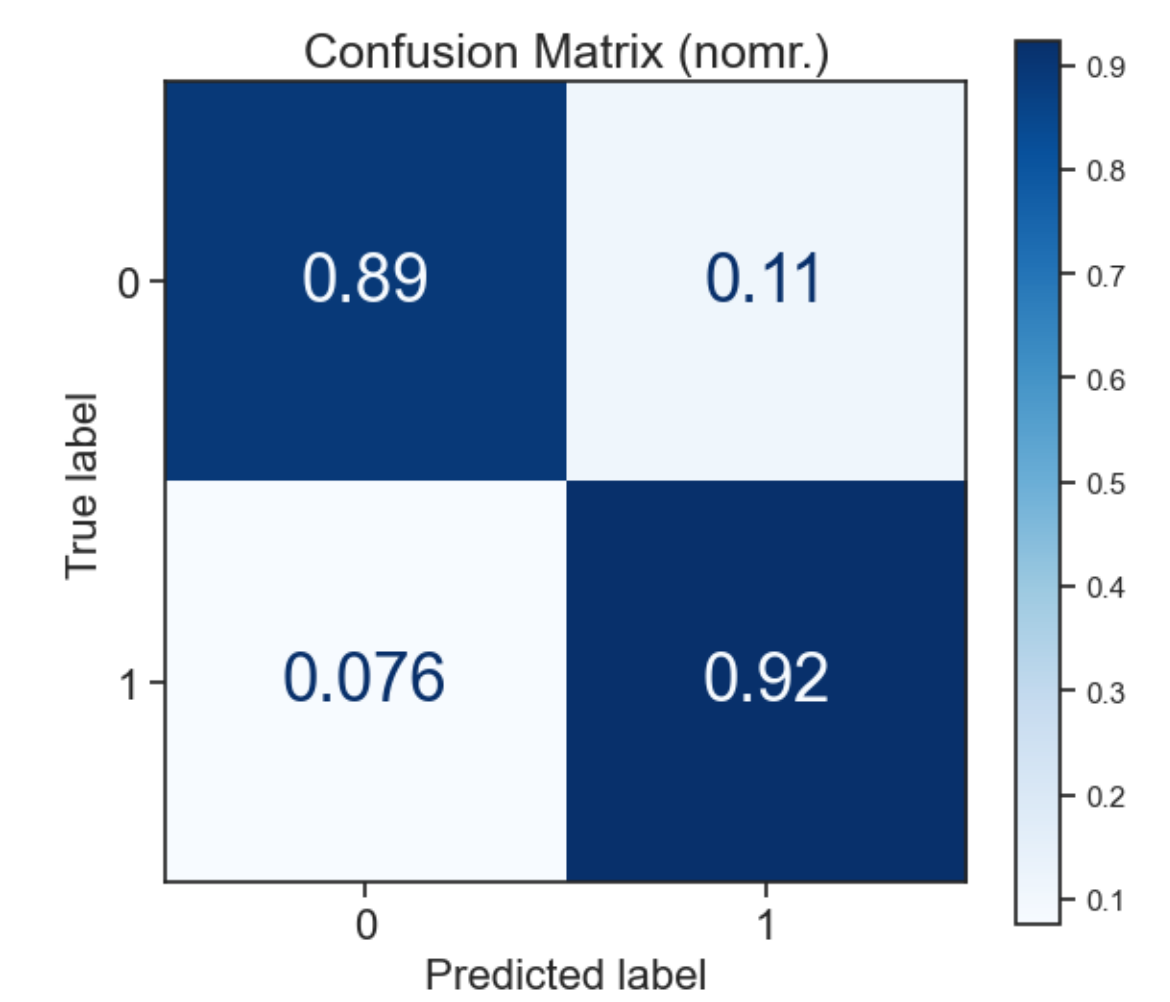
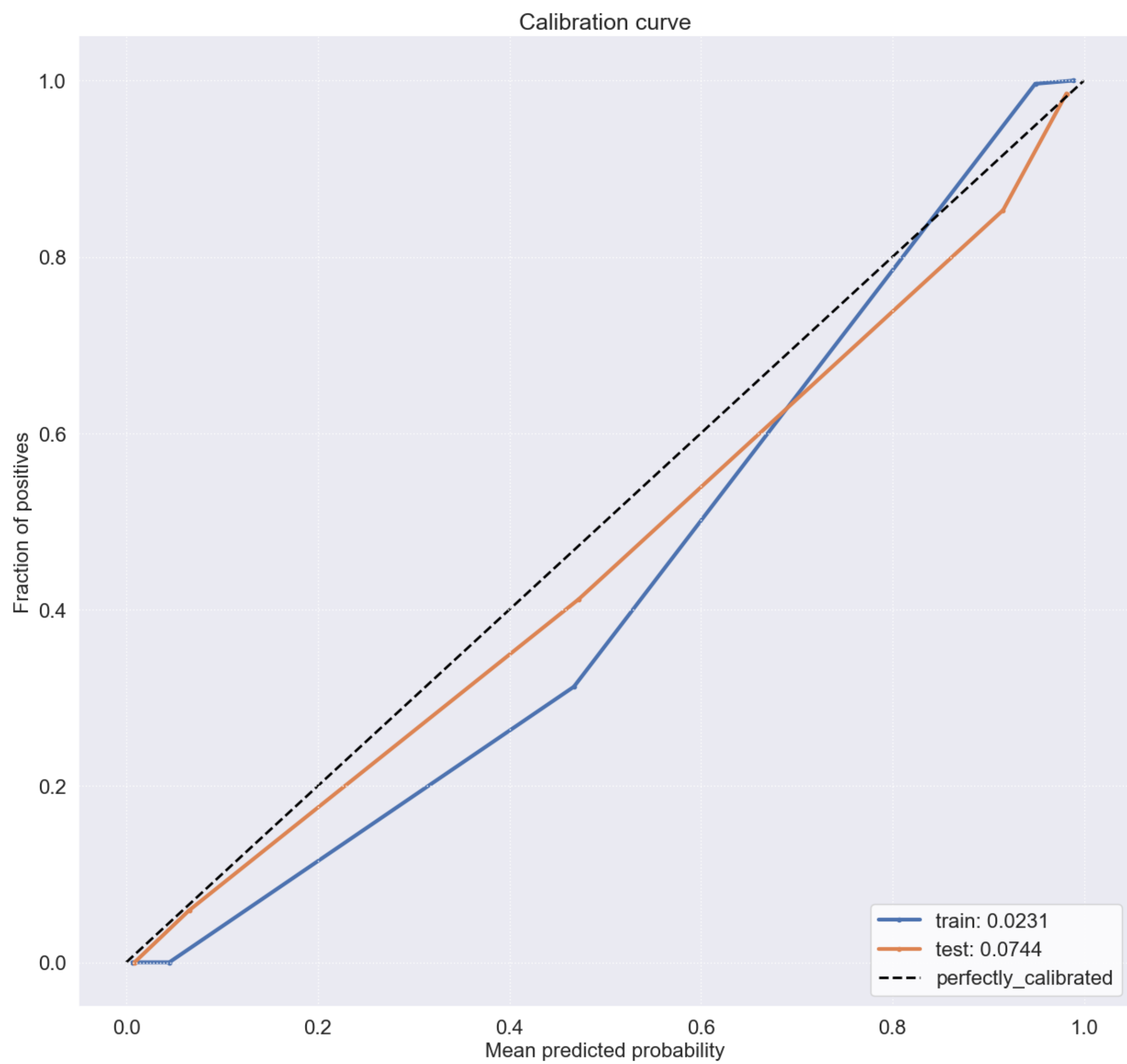
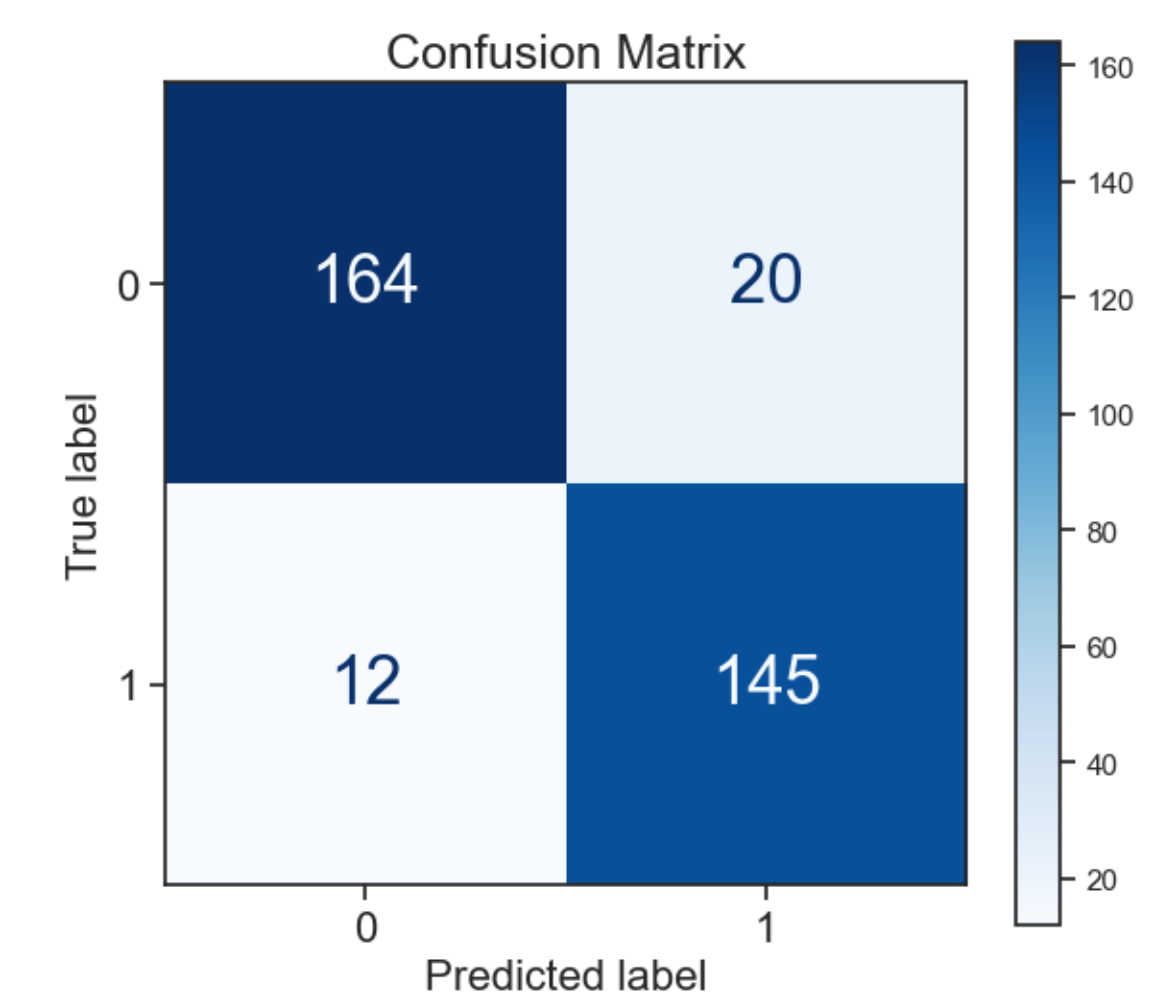
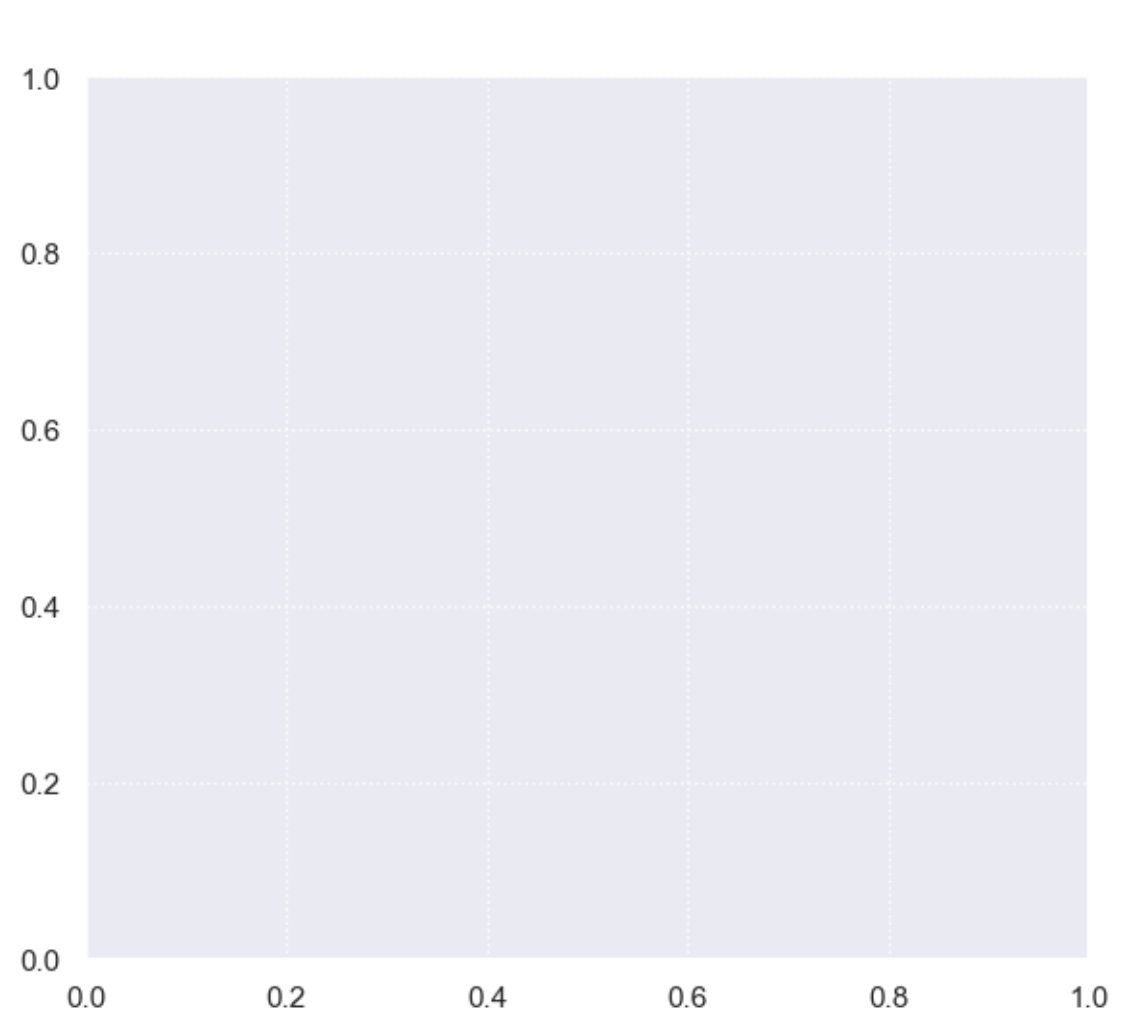
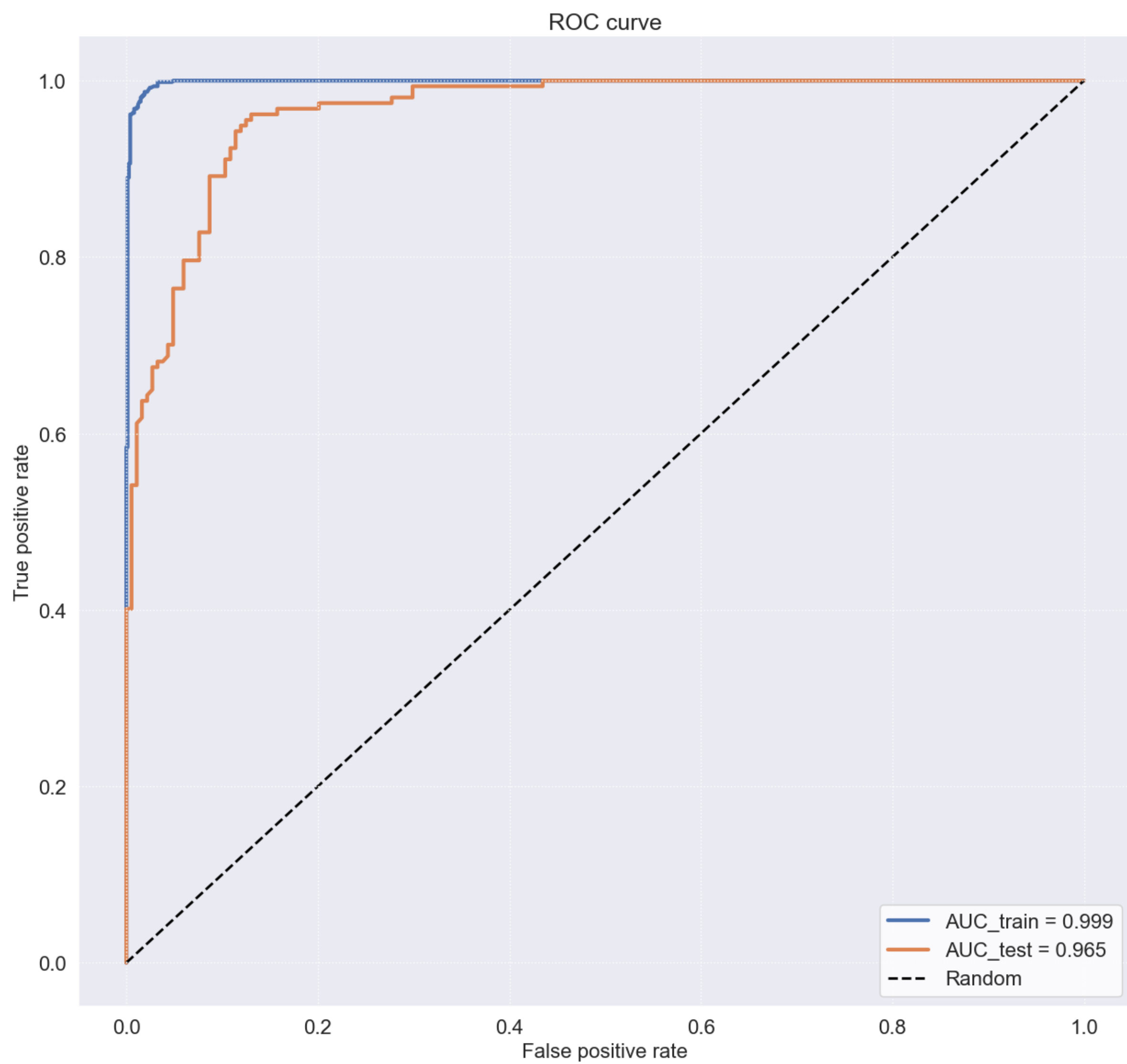
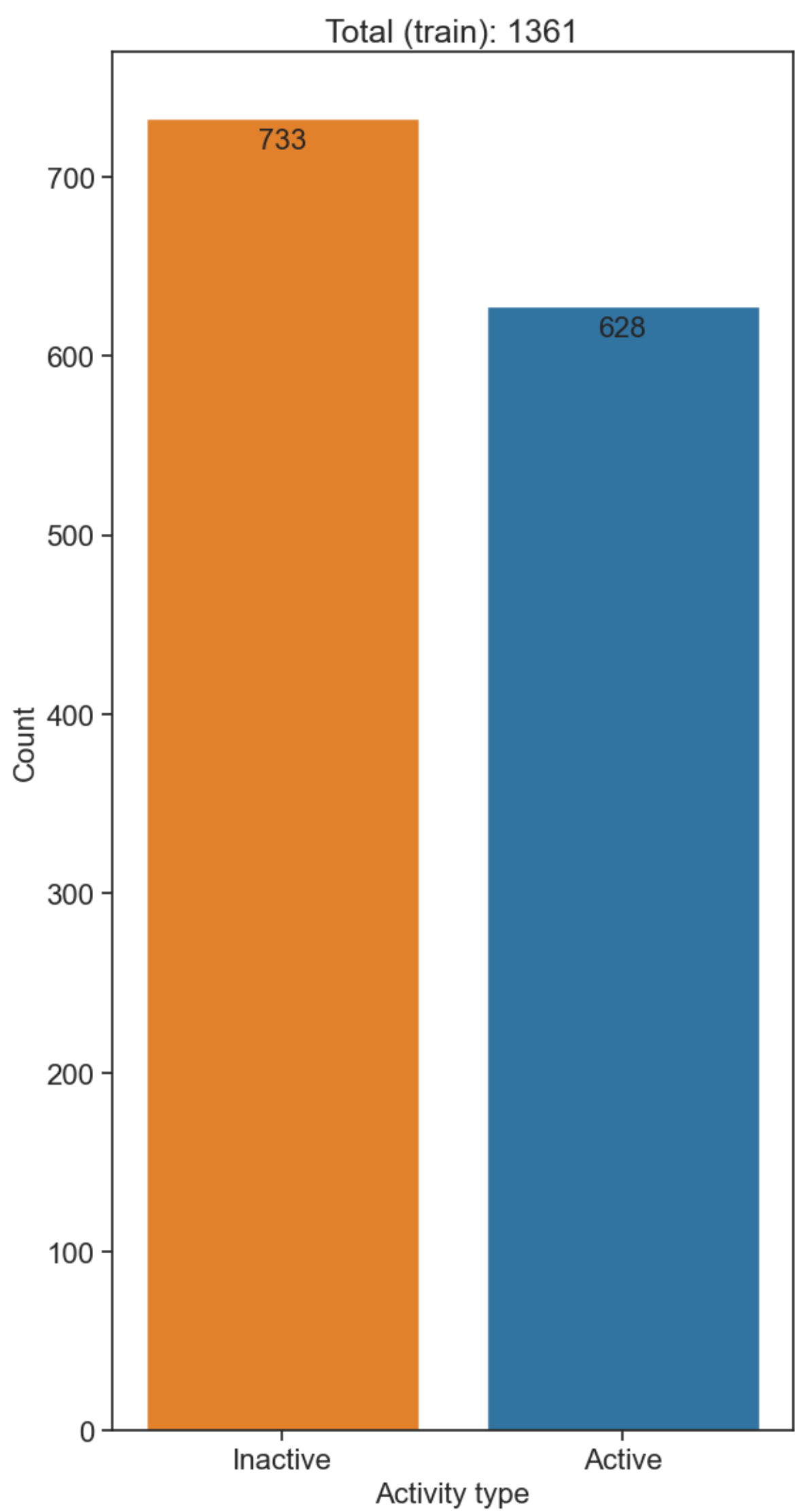


XGBoost Parameters	Value
alpha	0.3801
colsample_bytree	0.7793
gamma	0.0167
lambda	3.6012
learning_rate	0.0424
max_depth	9.0
min_child_weight	3.0
n_estimators	596.0
reg_alpha	0.2189
reg_lambda	0.3415
scale_pos_weight	3.5498
subsample	0.7963



Metric	Train	Test
AUC	0.9984	0.962
accuracy	0.9677	0.915
balanced accuracy	0.97	0.9179
recall_(sens)	1.0	0.9554
specificity	0.94	0.8804
precision	0.9345	0.8721
f1_score	0.9677	0.9151

Protein: Q99720 - metric: SoftVotingXGBoostEnsemble



Metric	Train	Test
AUC	0.9986	0.9645
accuracy	0.9743	0.9062
balanced accuracy	0.976	0.9074
recall_(sens)	0.9984	0.9236
specificity	0.9536	0.8913
precision	0.9486	0.8788
f1_score	0.9743	0.9063