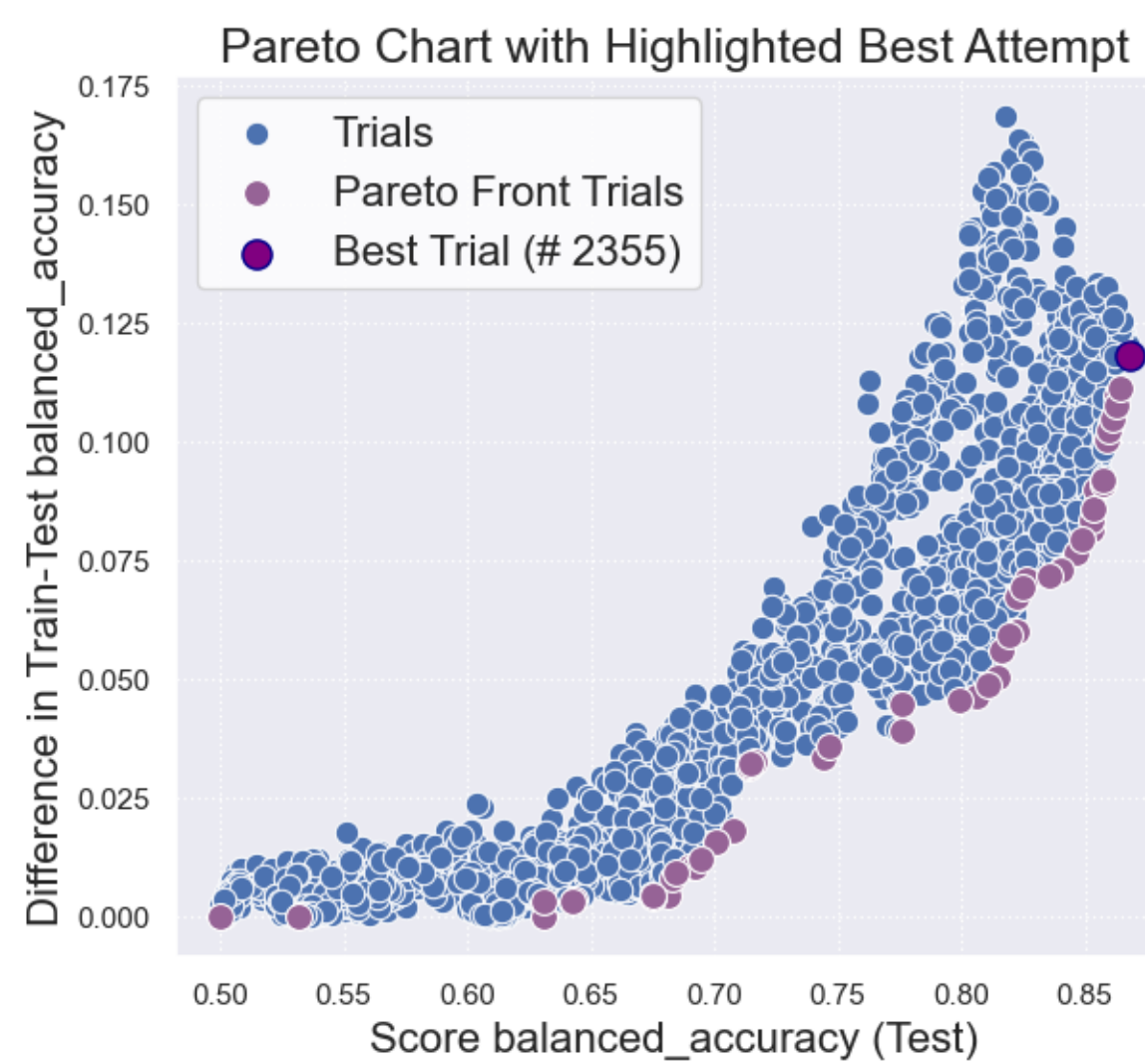
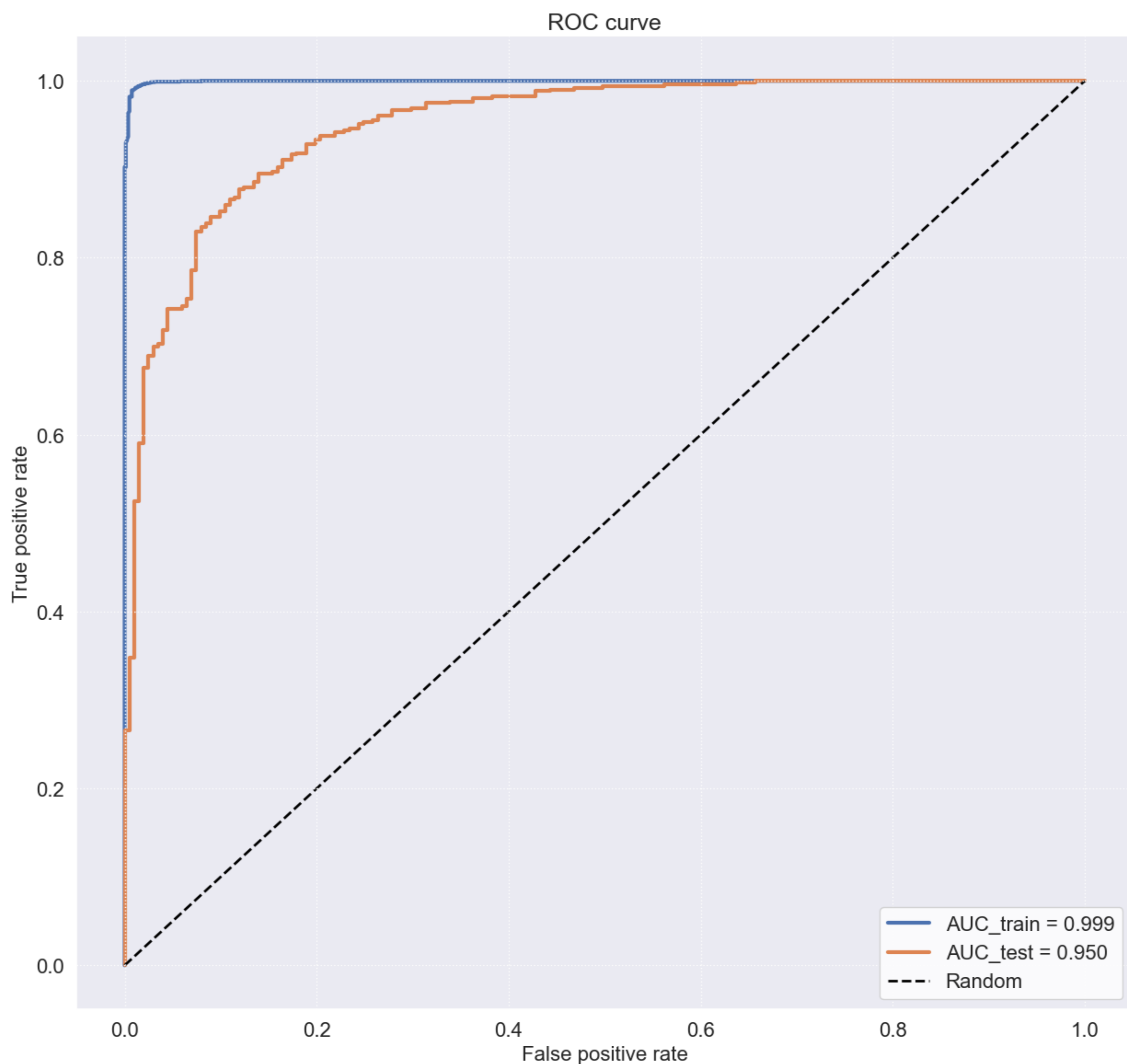
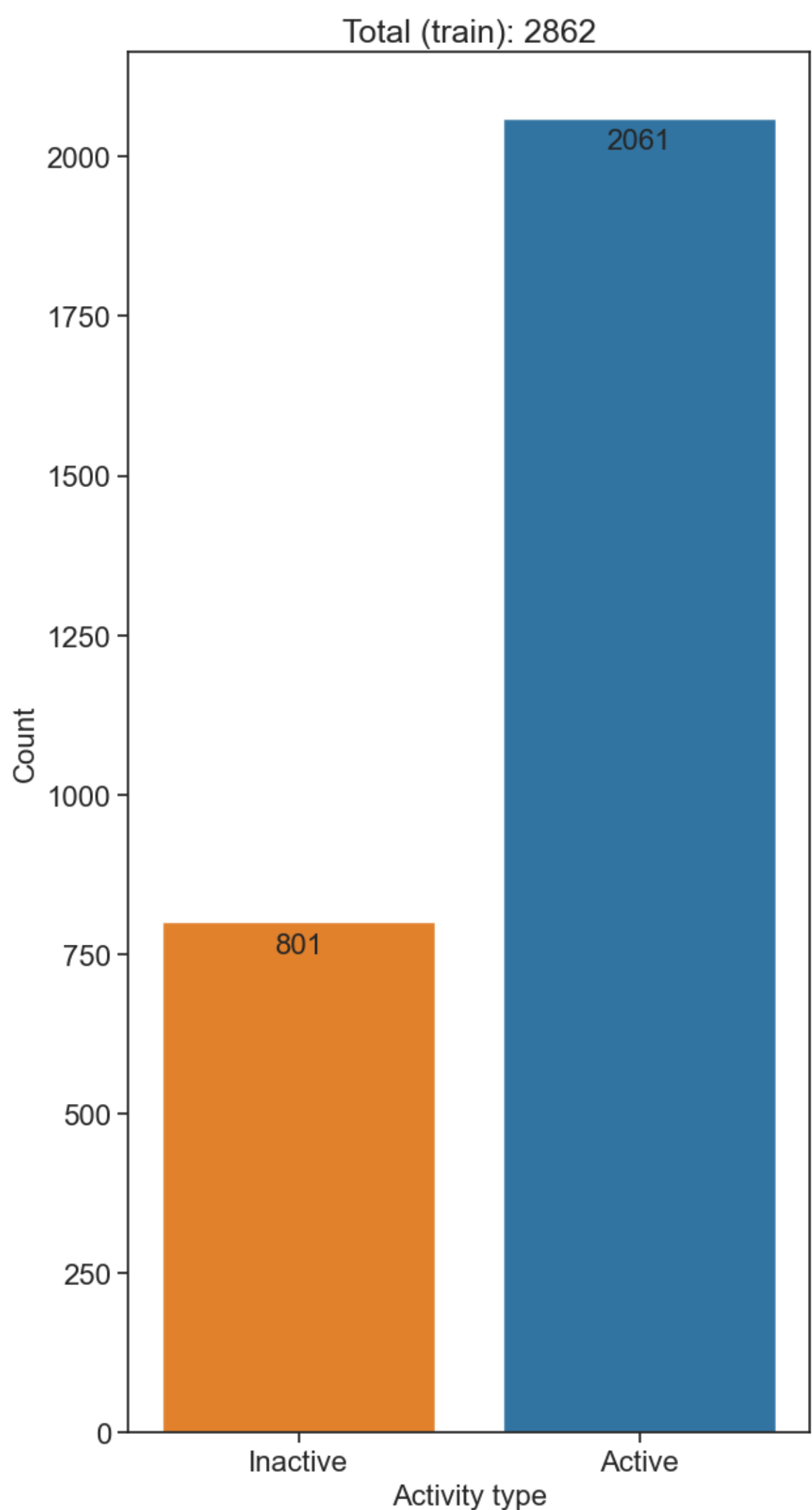
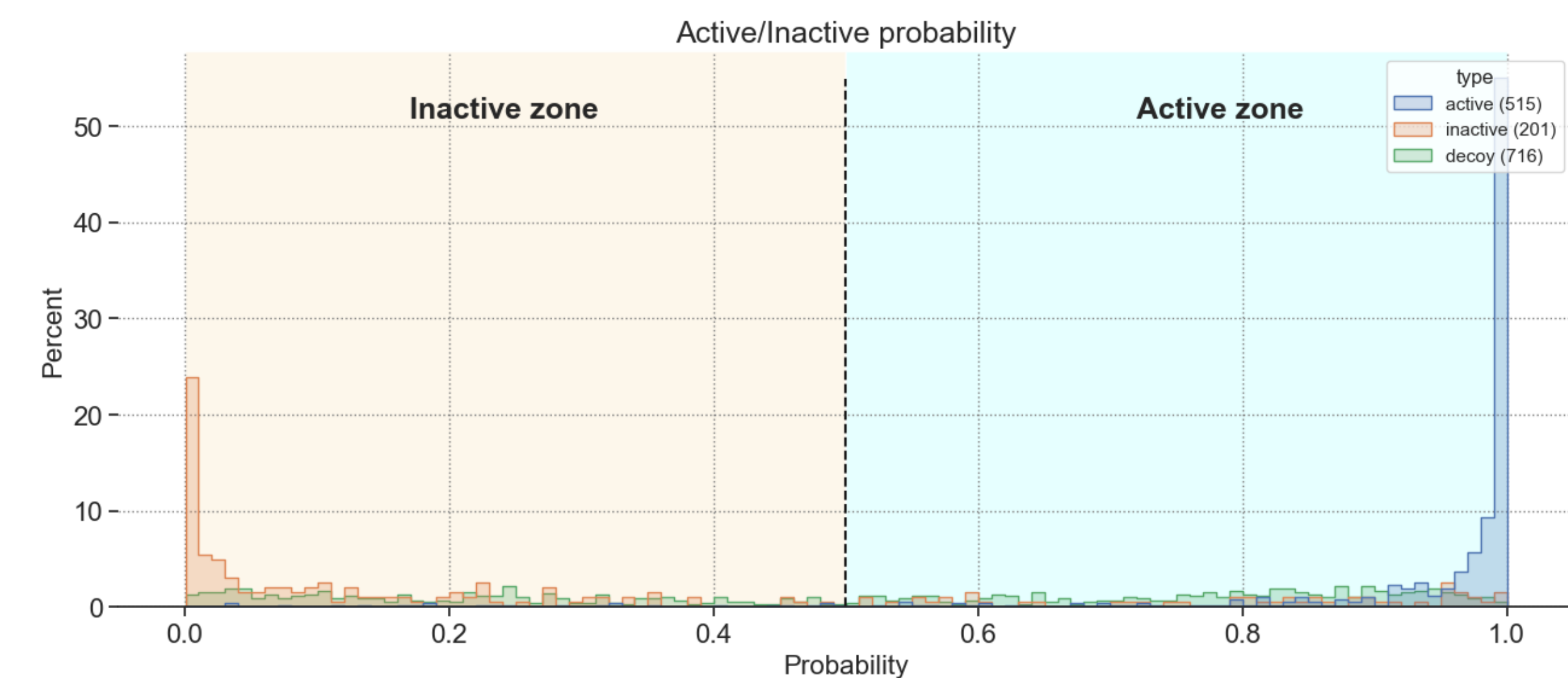
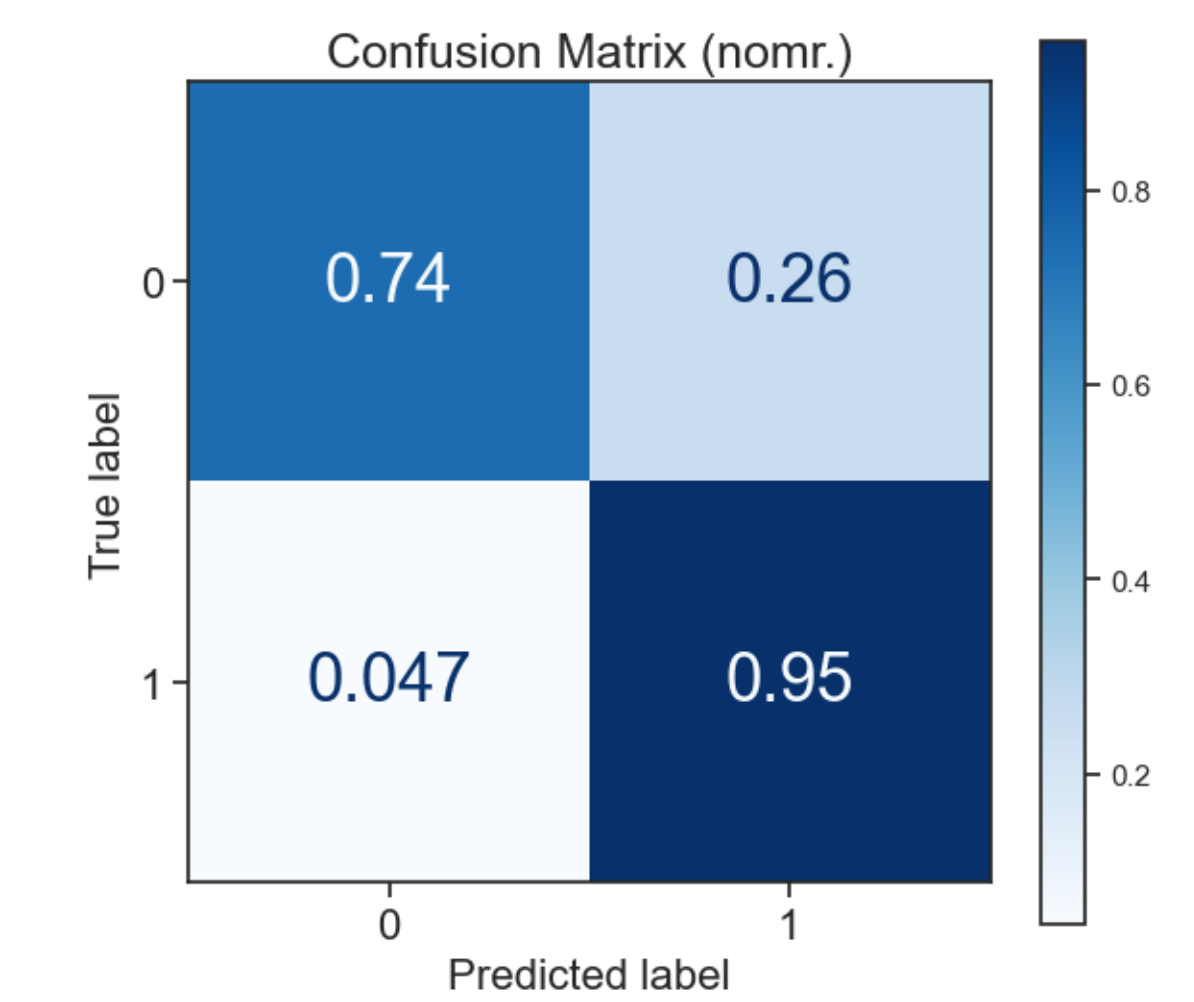
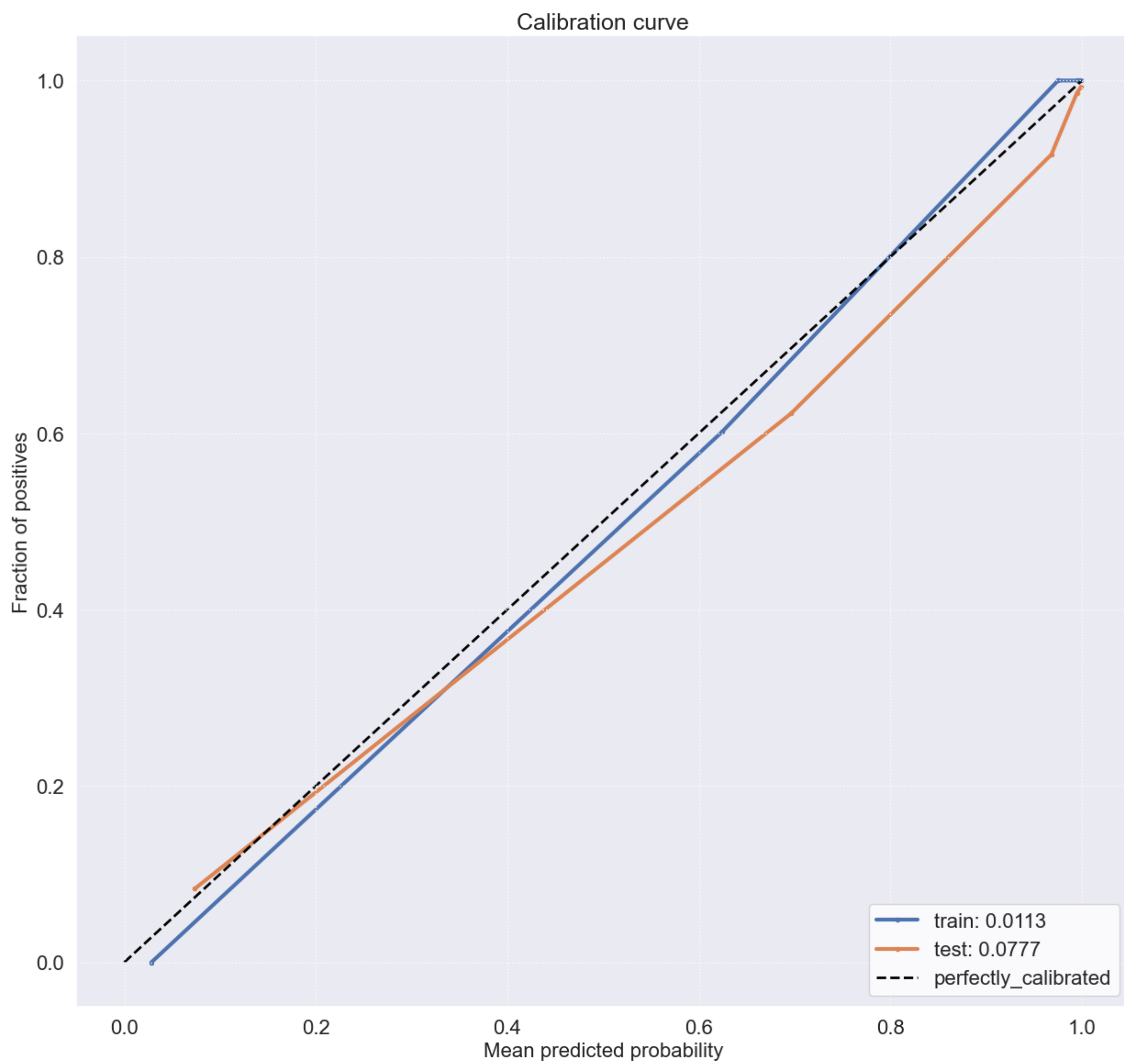
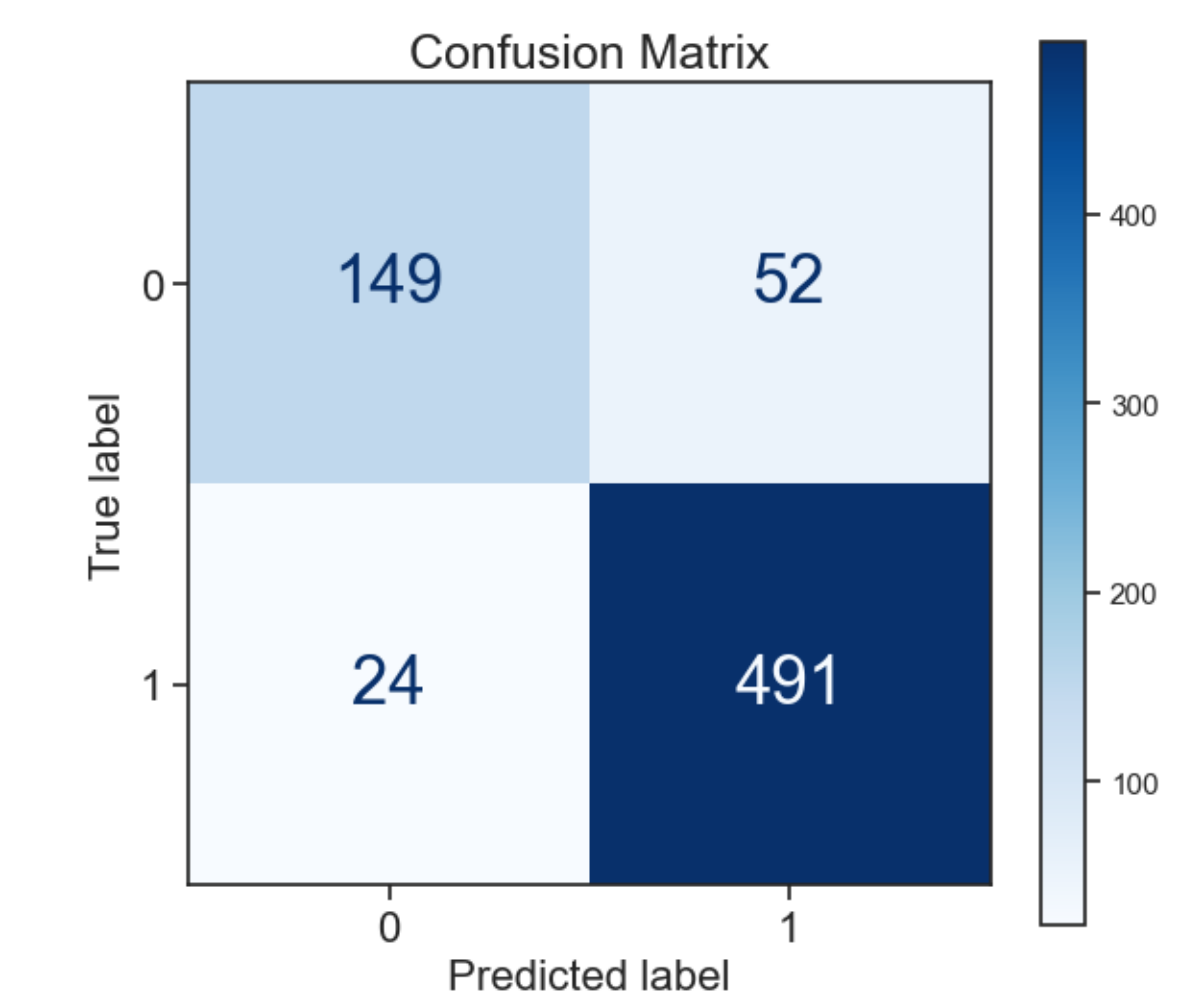


Protein: P22303 - metric: balanced_accuracy

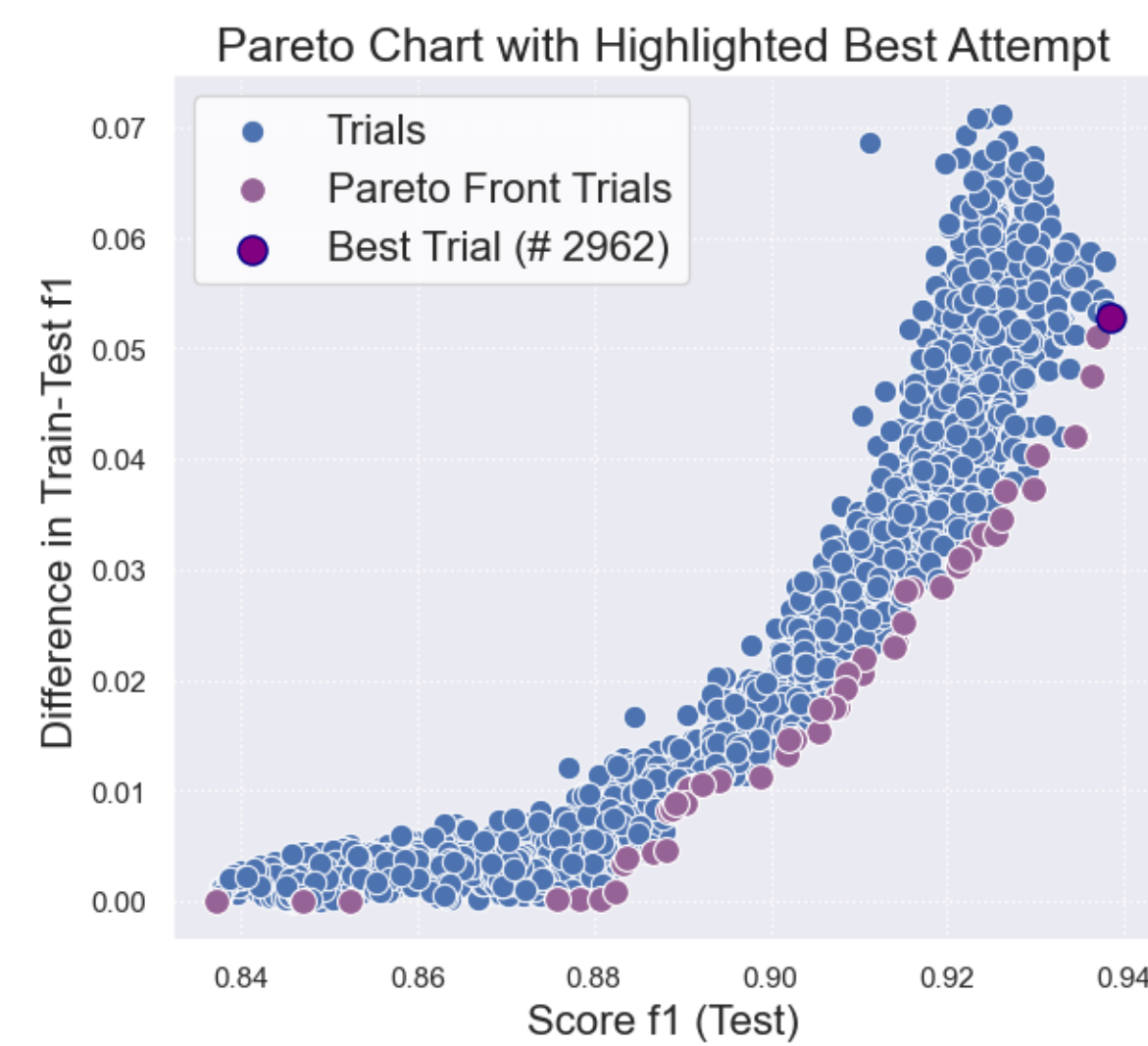
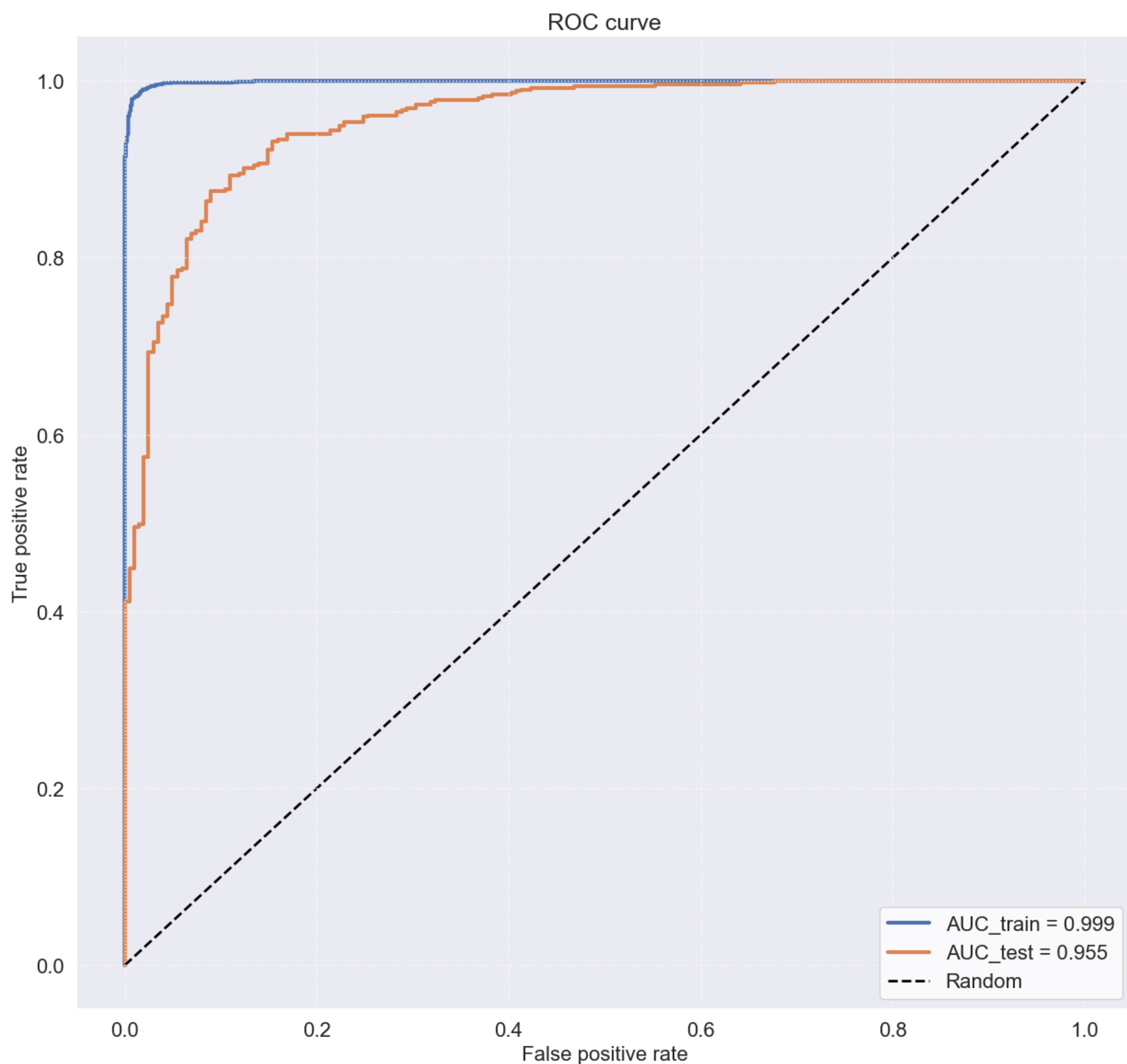
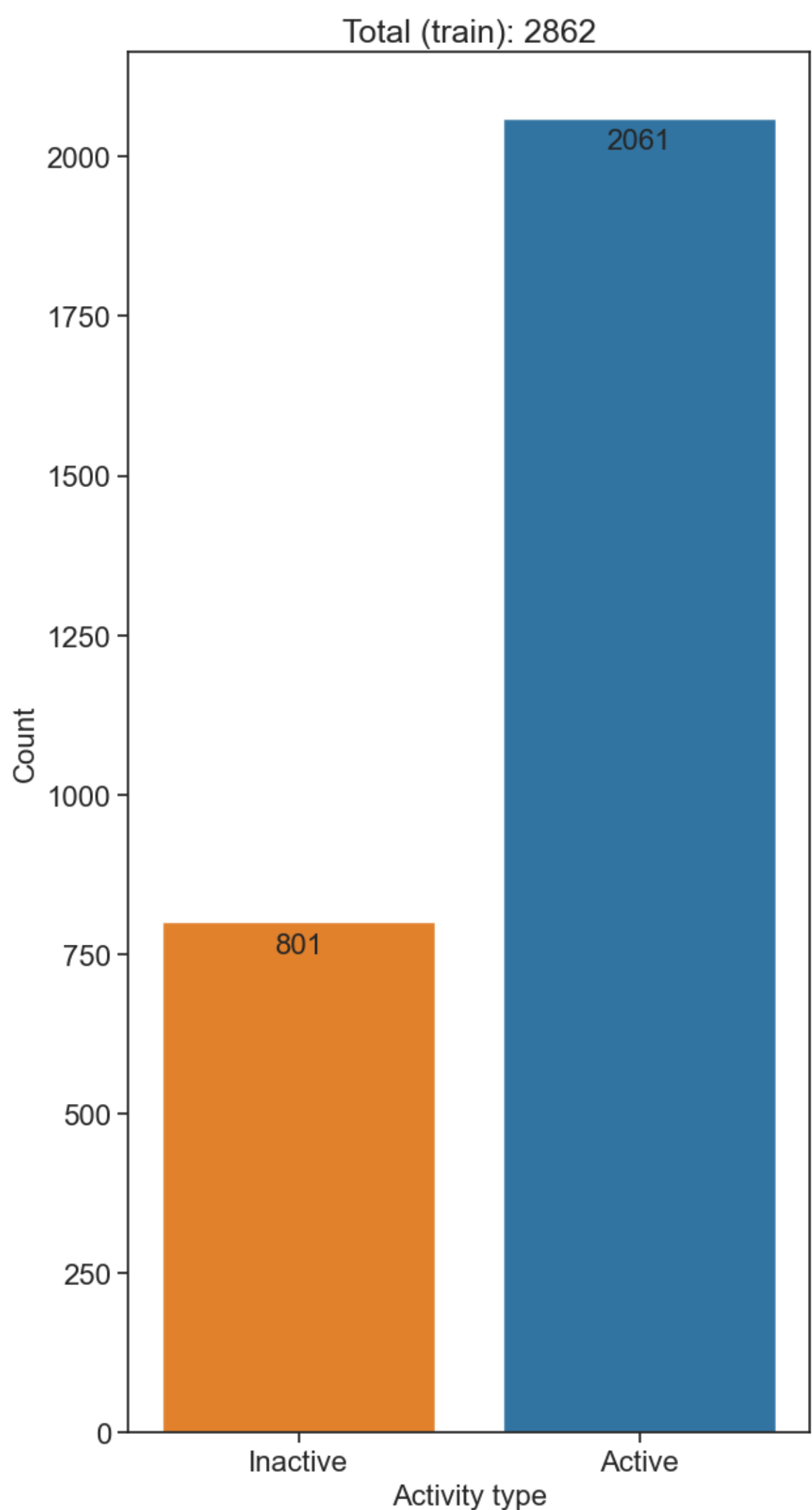


XGBoost Parameters	Value
alpha	3.8053
colsample_bytree	0.8577
gamma	0.1053
lambda	3.6939
learning_rate	0.1257
max_depth	10.0
min_child_weight	4.0
n_estimators	819.0
reg_alpha	0.3784
reg_lambda	0.9479
scale_pos_weight	1.193
subsample	0.9574

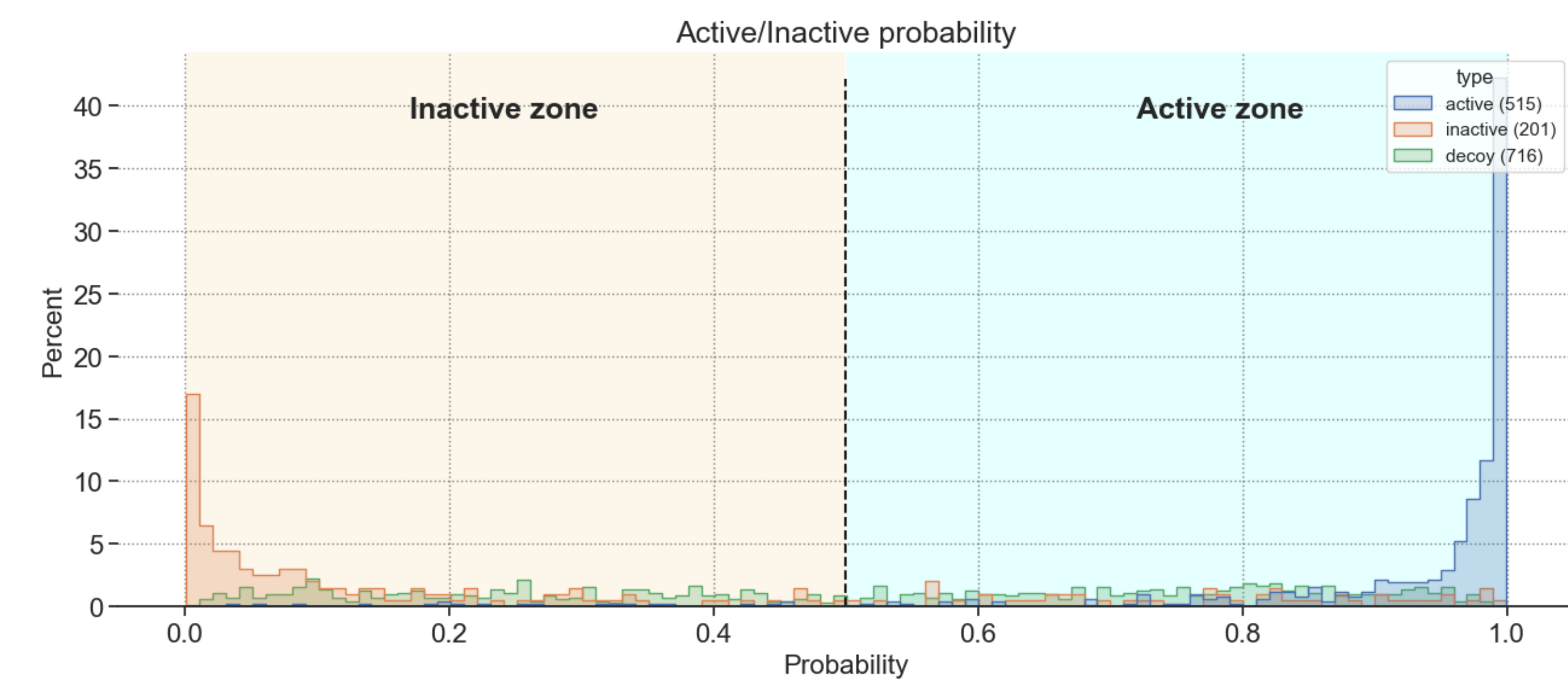
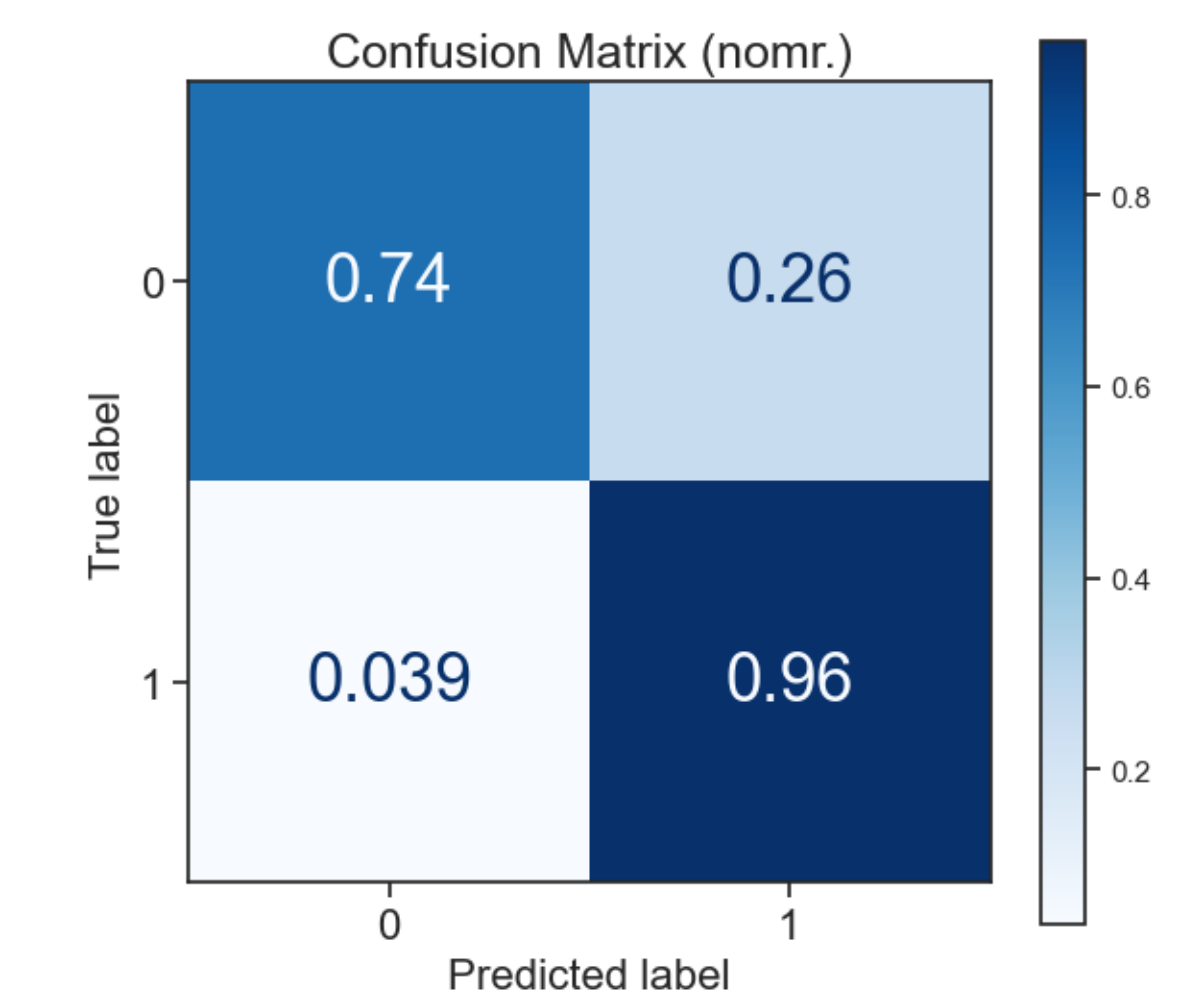
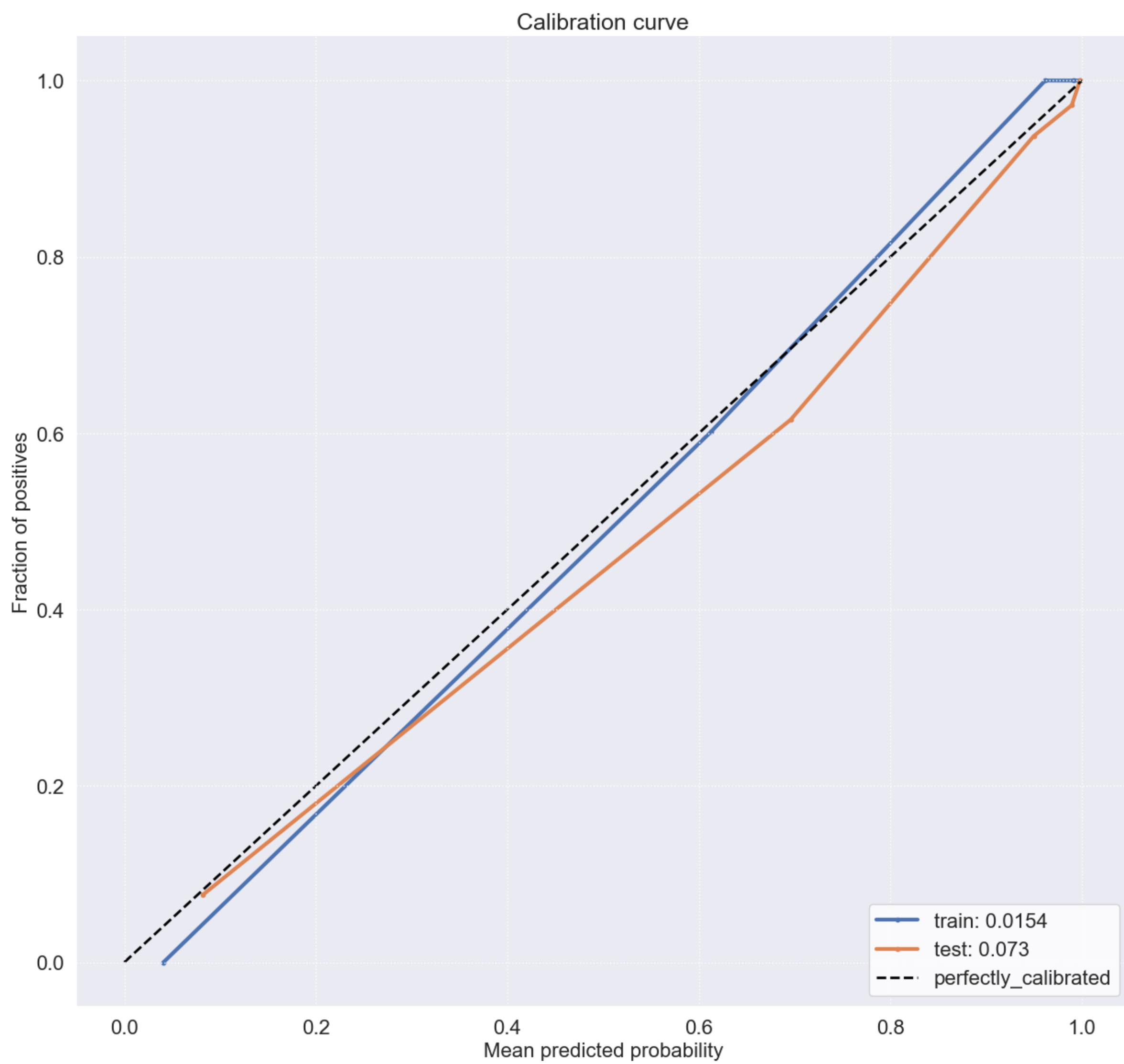
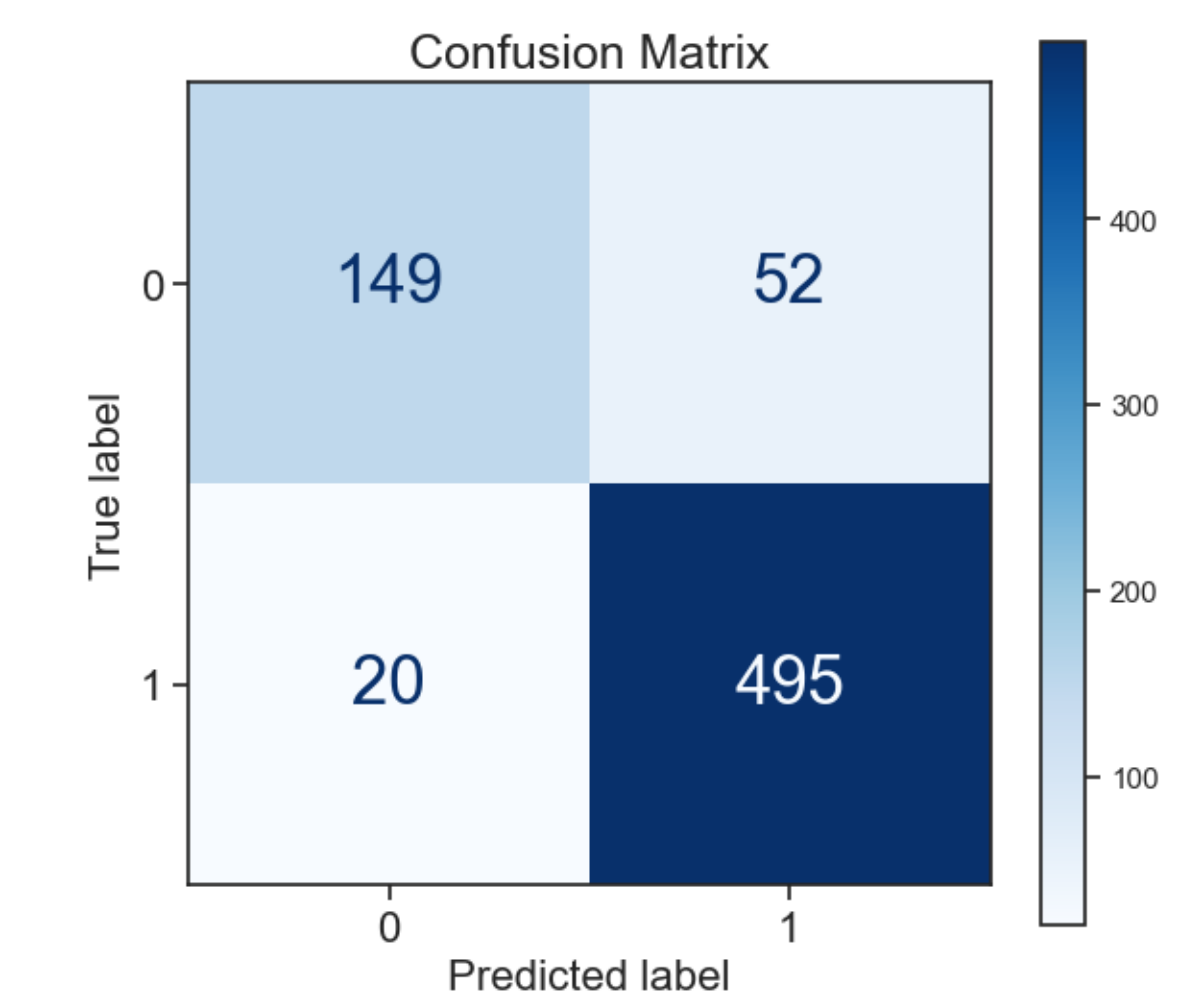


Metric	Train	Test
AUC	0.9995	0.9502
accuracy	0.9906	0.8939
balanced accuracy	0.9843	0.8473
recall_(sens)	0.9985	0.9534
specificity	0.97	0.7413
precision	0.9885	0.9042
f1_score	0.9905	0.8913

Protein: P22303 - metric: f1

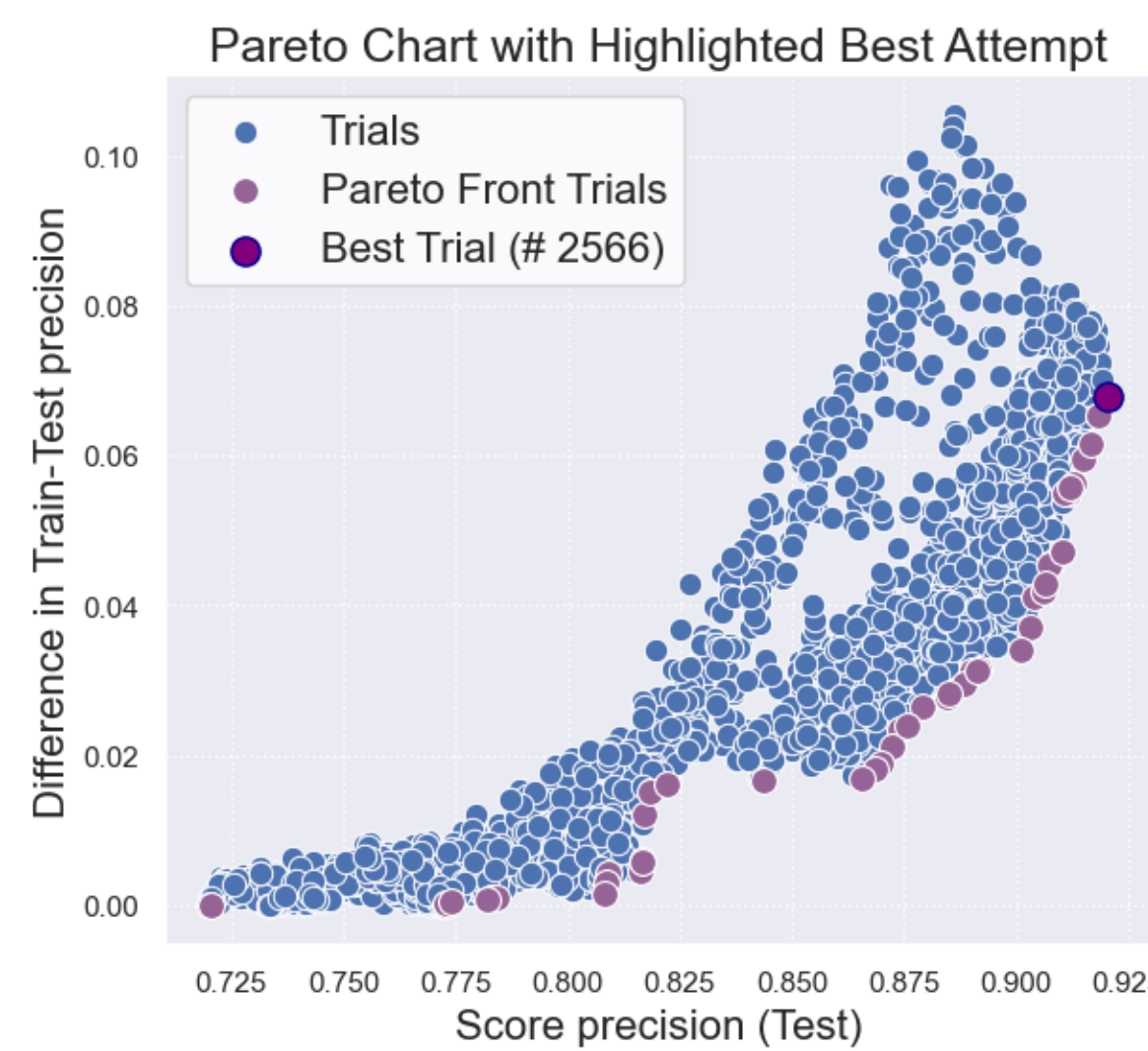
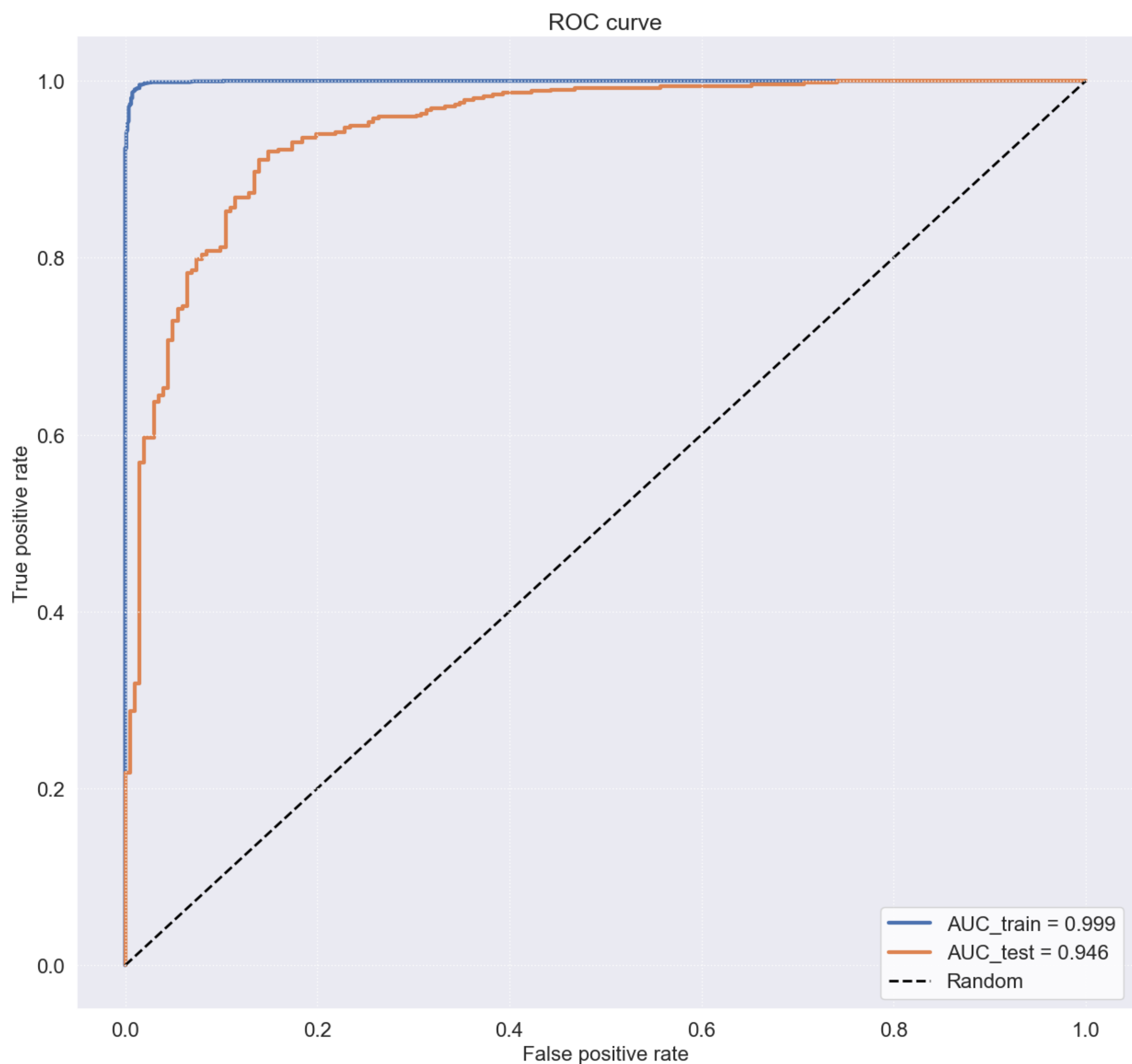
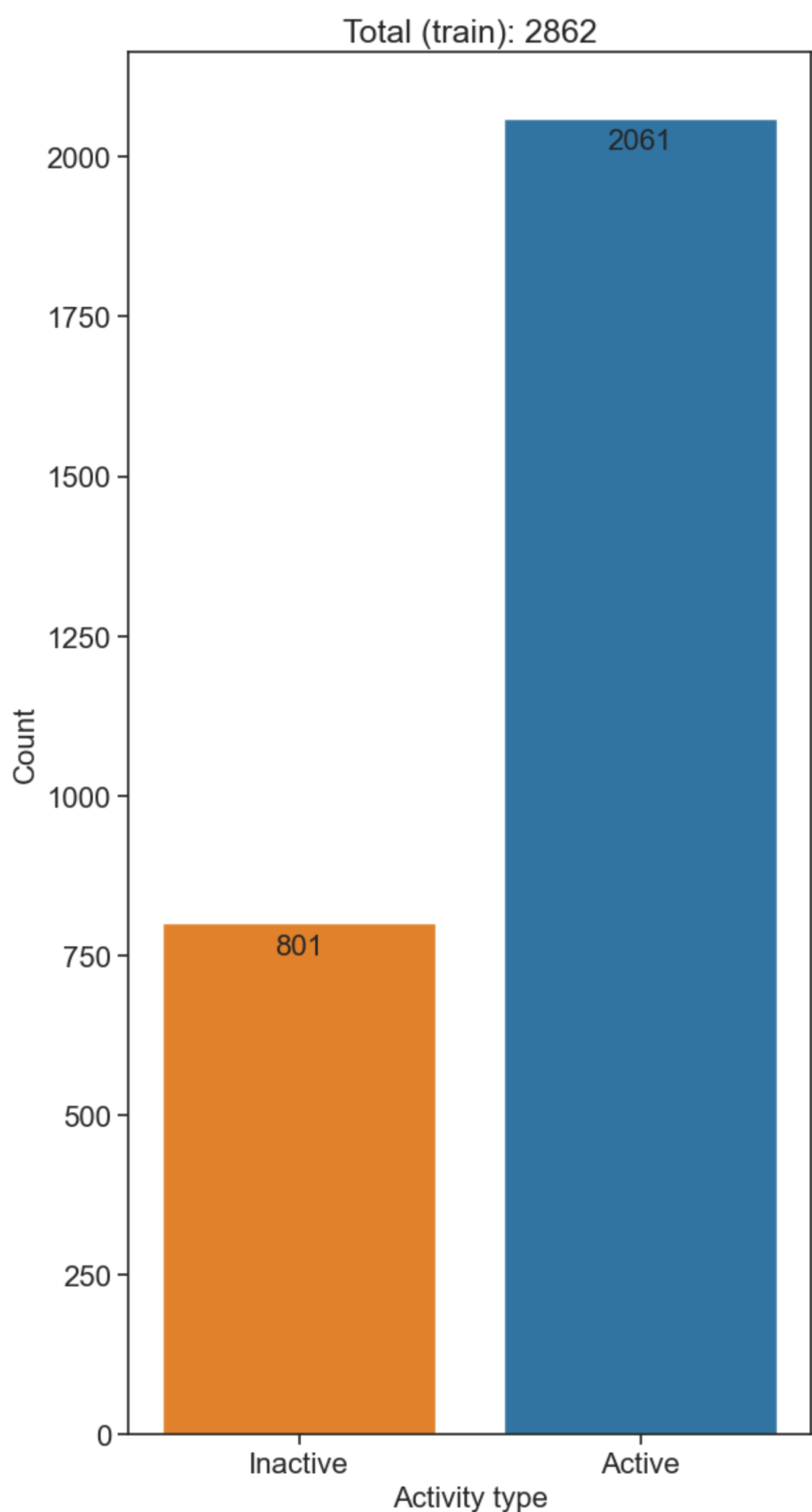


XGBoost Parameters	Value
alpha	4.2569
colsample_bytree	0.7697
gamma	0.6113
lambda	2.9558
learning_rate	0.0457
max_depth	10.0
min_child_weight	1.0
n_estimators	968.0
reg_alpha	0.3906
reg_lambda	0.689
scale_pos_weight	1.0114
subsample	0.6931

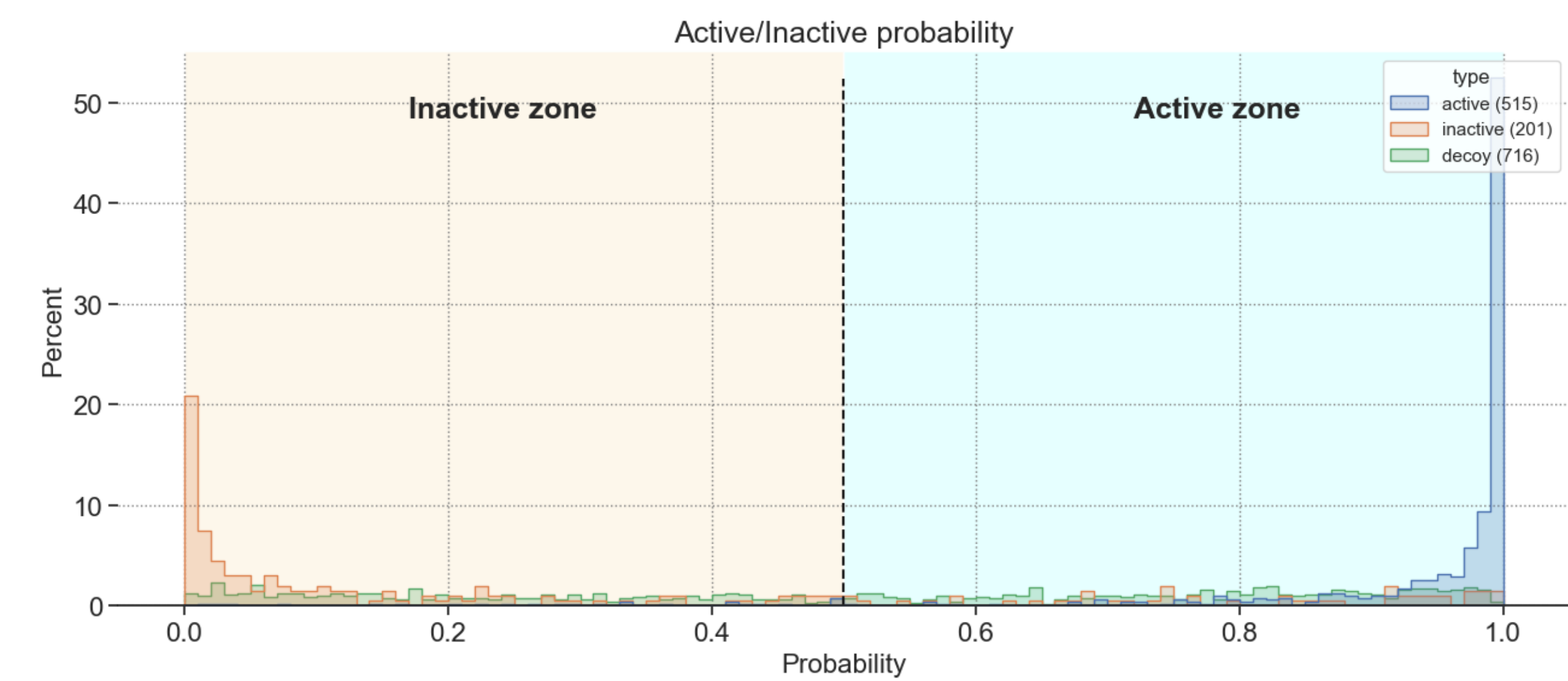
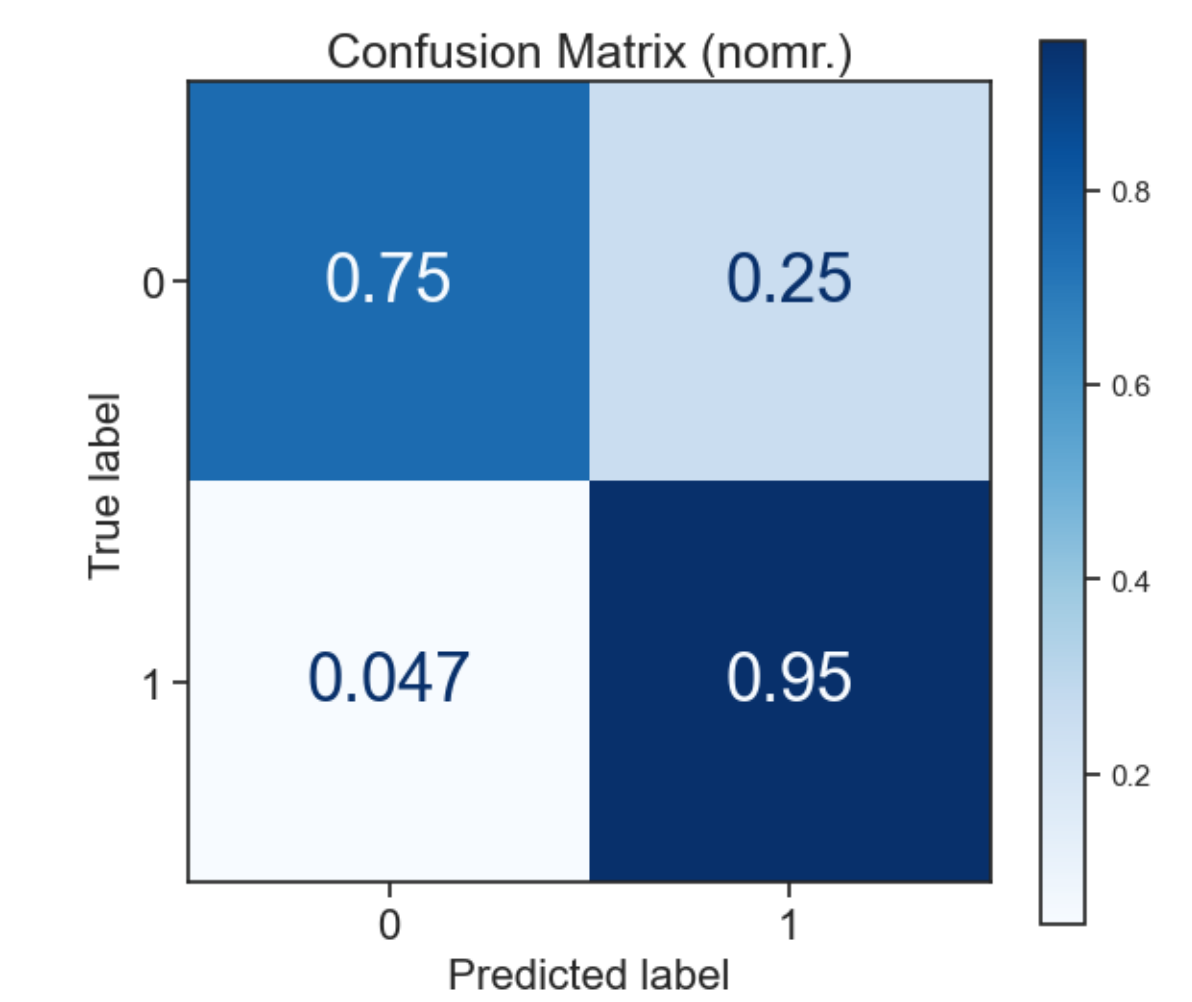
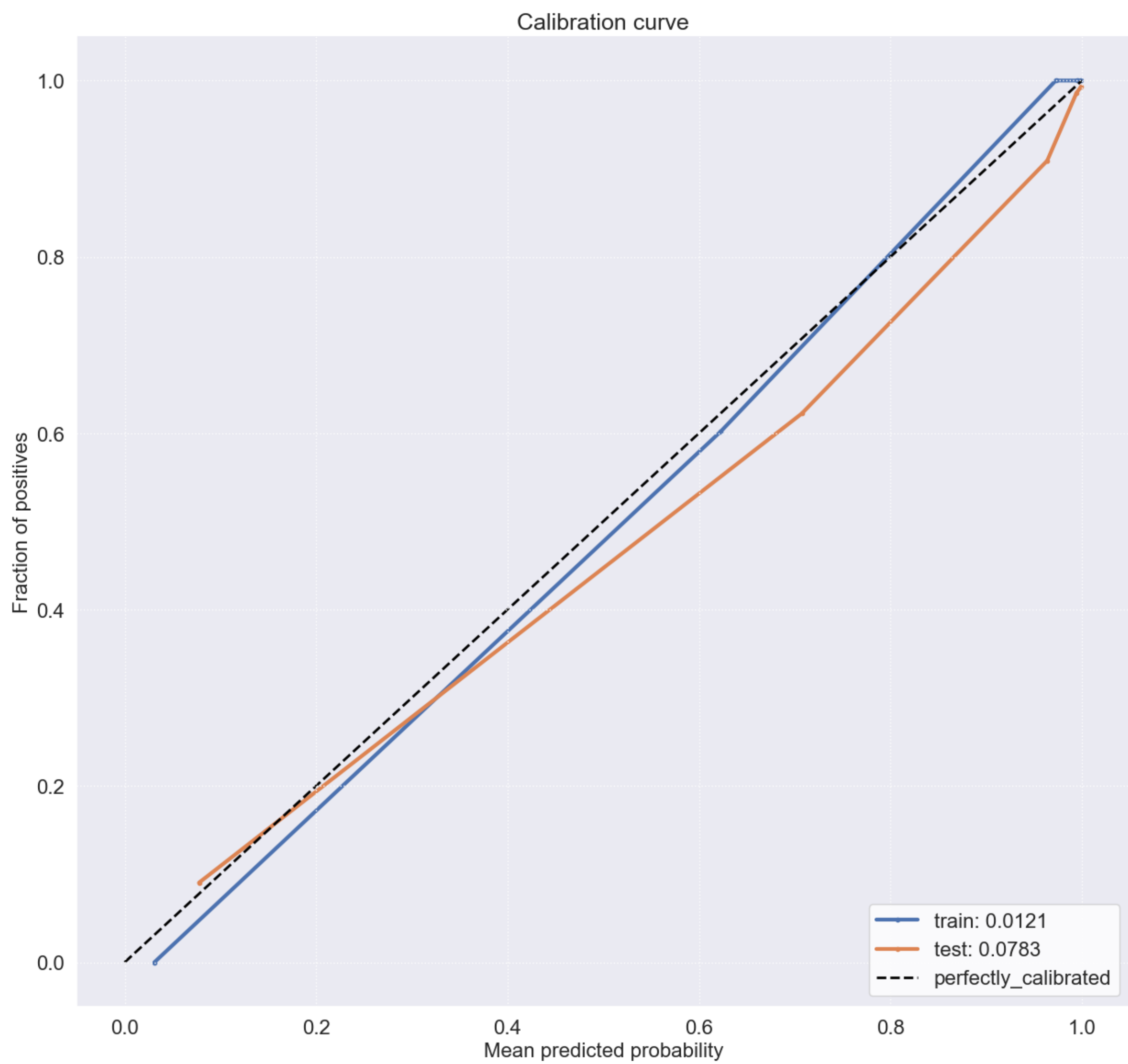
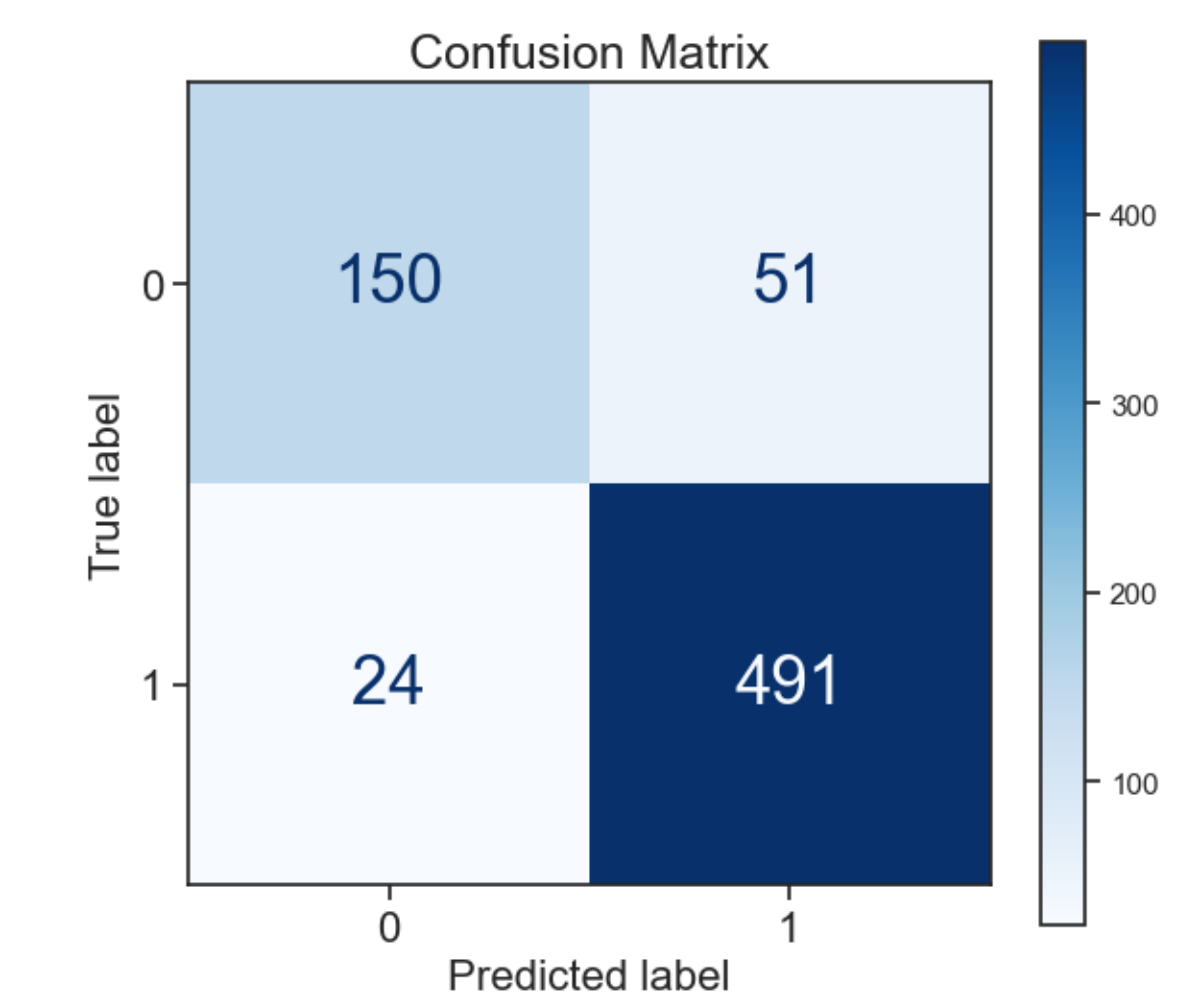


Metric	Train	Test
AUC	0.9991	0.9552
accuracy	0.9878	0.8994
balanced accuracy	0.9816	0.8512
recall_(sens)	0.9956	0.9612
specificity	0.9675	0.7413
precision	0.9875	0.9049
f1_score	0.9877	0.8966

Protein: P22303 - metric: precision

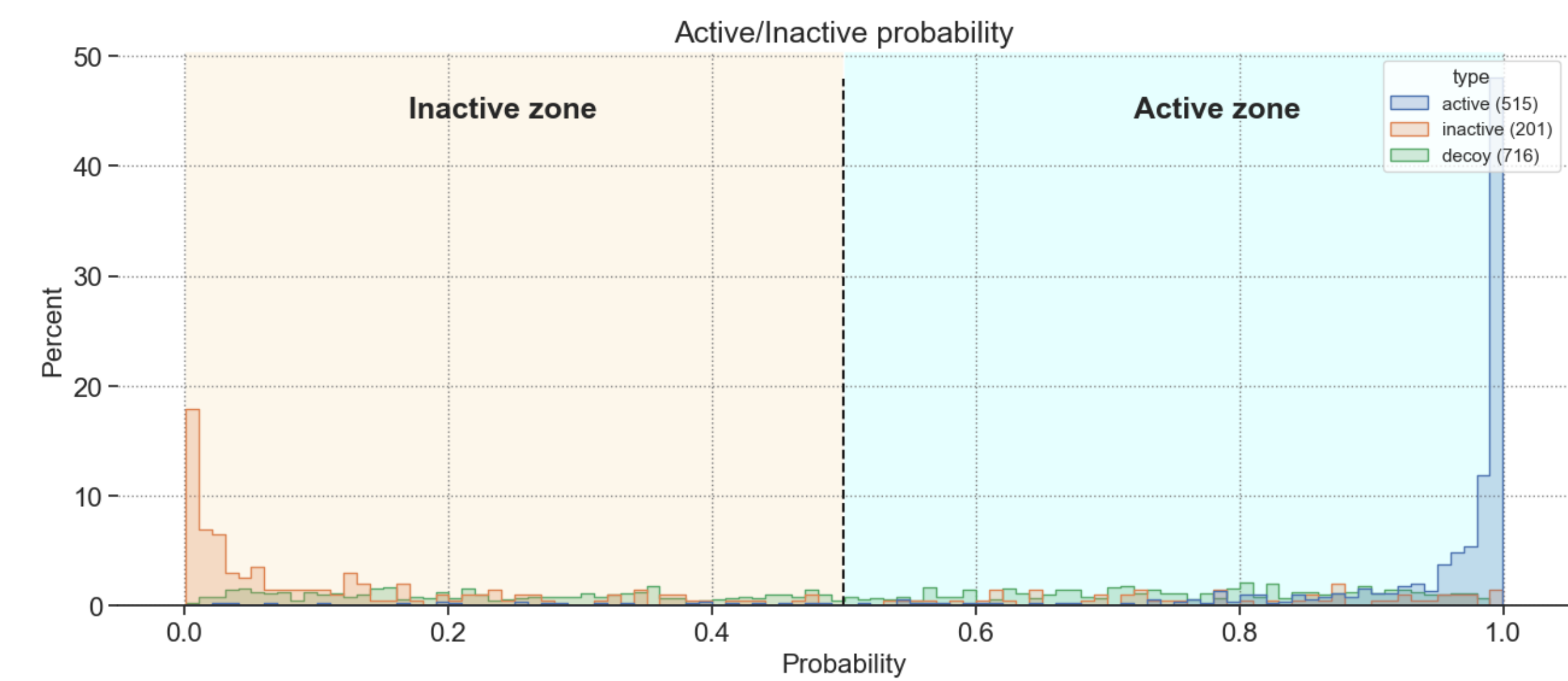
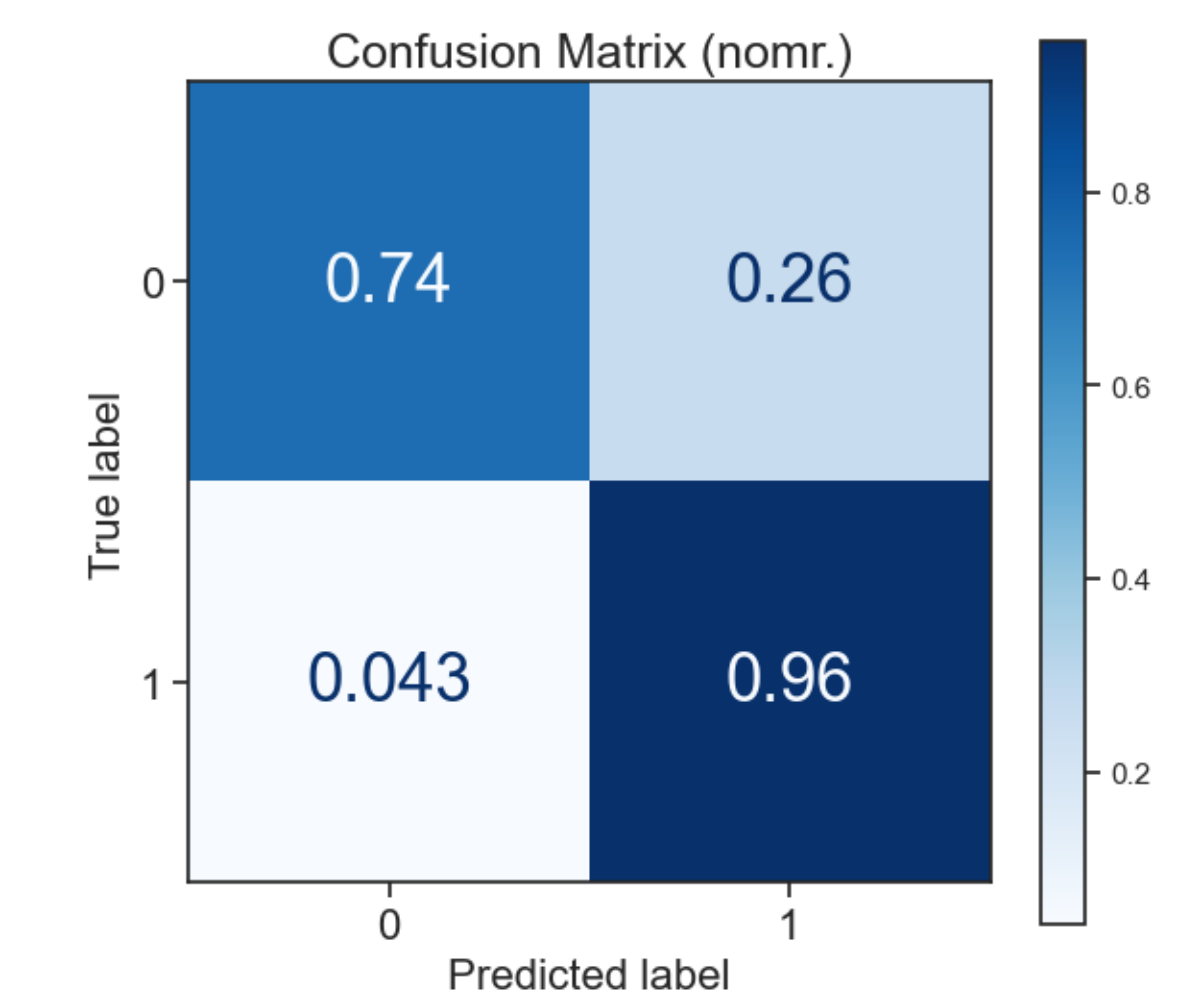
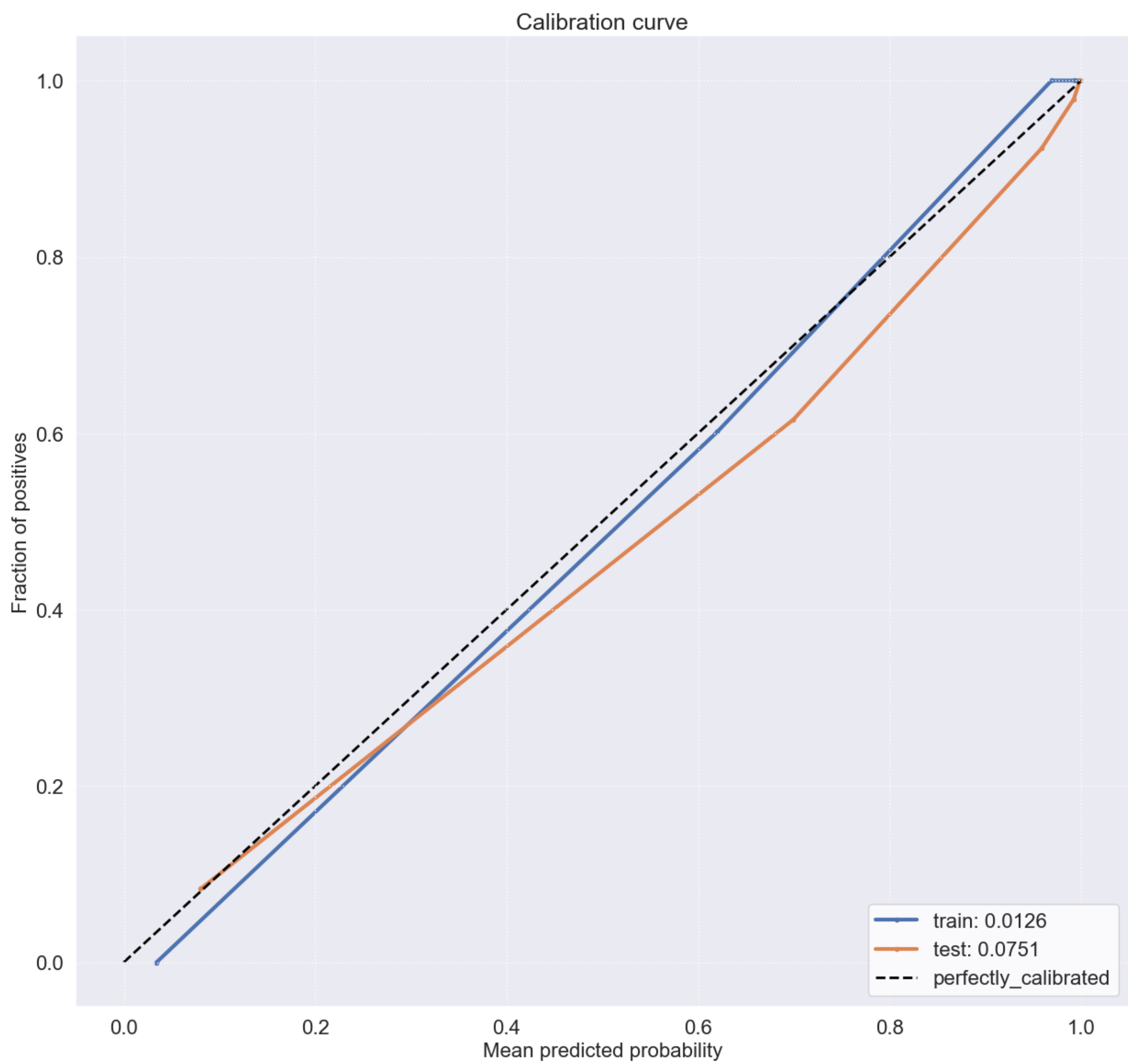
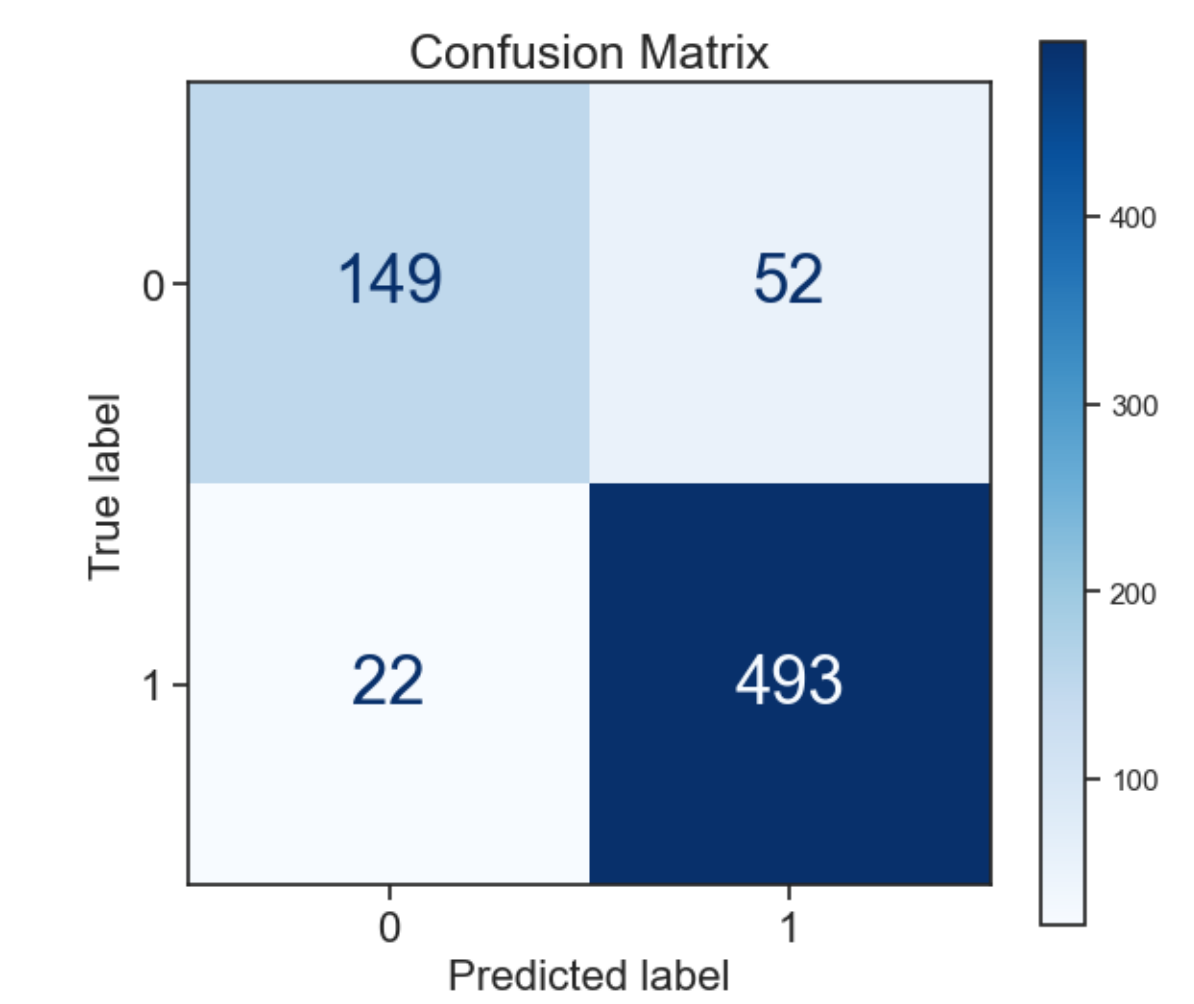
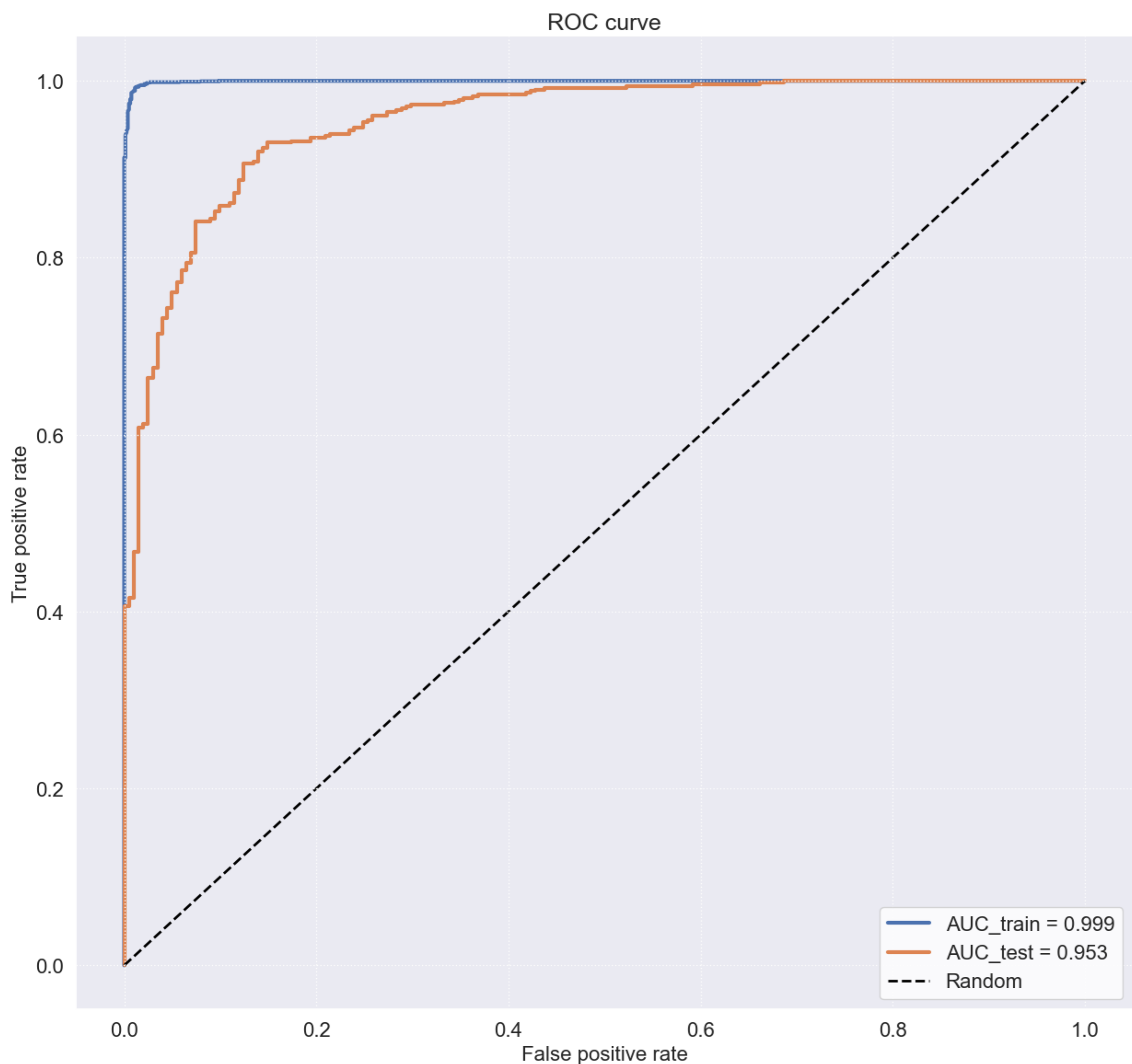
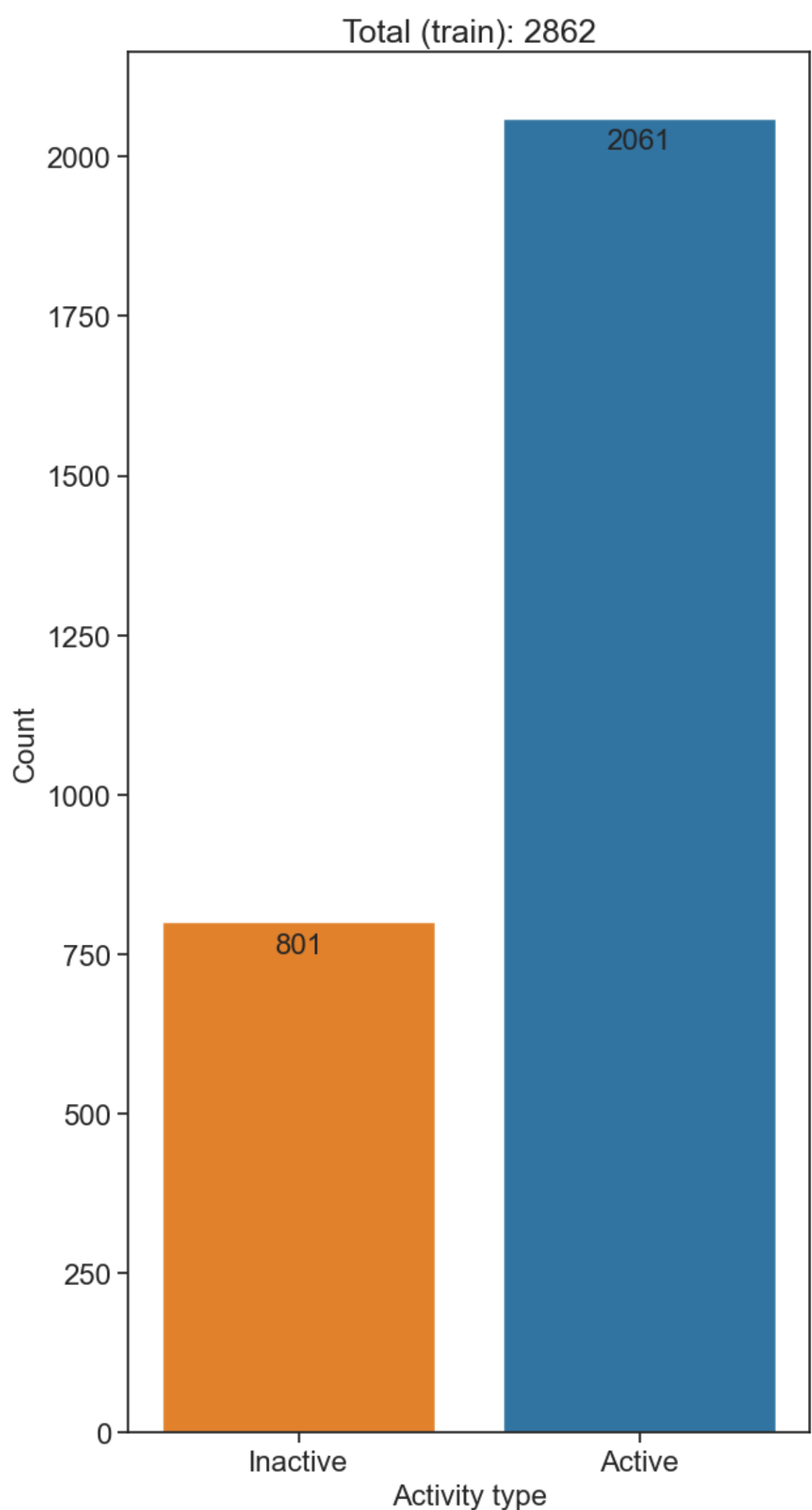


XGBoost Parameters	Value
alpha	3.3512
colsample_bytree	0.948
gamma	0.3442
lambda	2.5896
learning_rate	0.0741
max_depth	10.0
min_child_weight	2.0
n_estimators	559.0
reg_alpha	0.4796
reg_lambda	0.0089
scale_pos_weight	1.1565
subsample	0.5113



Metric	Train	Test
AUC	0.9995	0.9456
accuracy	0.9913	0.8953
balanced accuracy	0.9855	0.8498
recall_(sens)	0.9985	0.9534
specificity	0.9725	0.7463
precision	0.9894	0.9059
f1_score	0.9912	0.8928

Protein: P22303 - metric: SoftVotingXGBoostEnsemble



Metric	Train	Test
AUC	0.9995	0.9533
accuracy	0.9913	0.8966
balanced accuracy	0.9855	0.8493
recall_(sens)	0.9985	0.9573
specificity	0.9725	0.7413
precision	0.9894	0.9046
f1_score	0.9912	0.8939