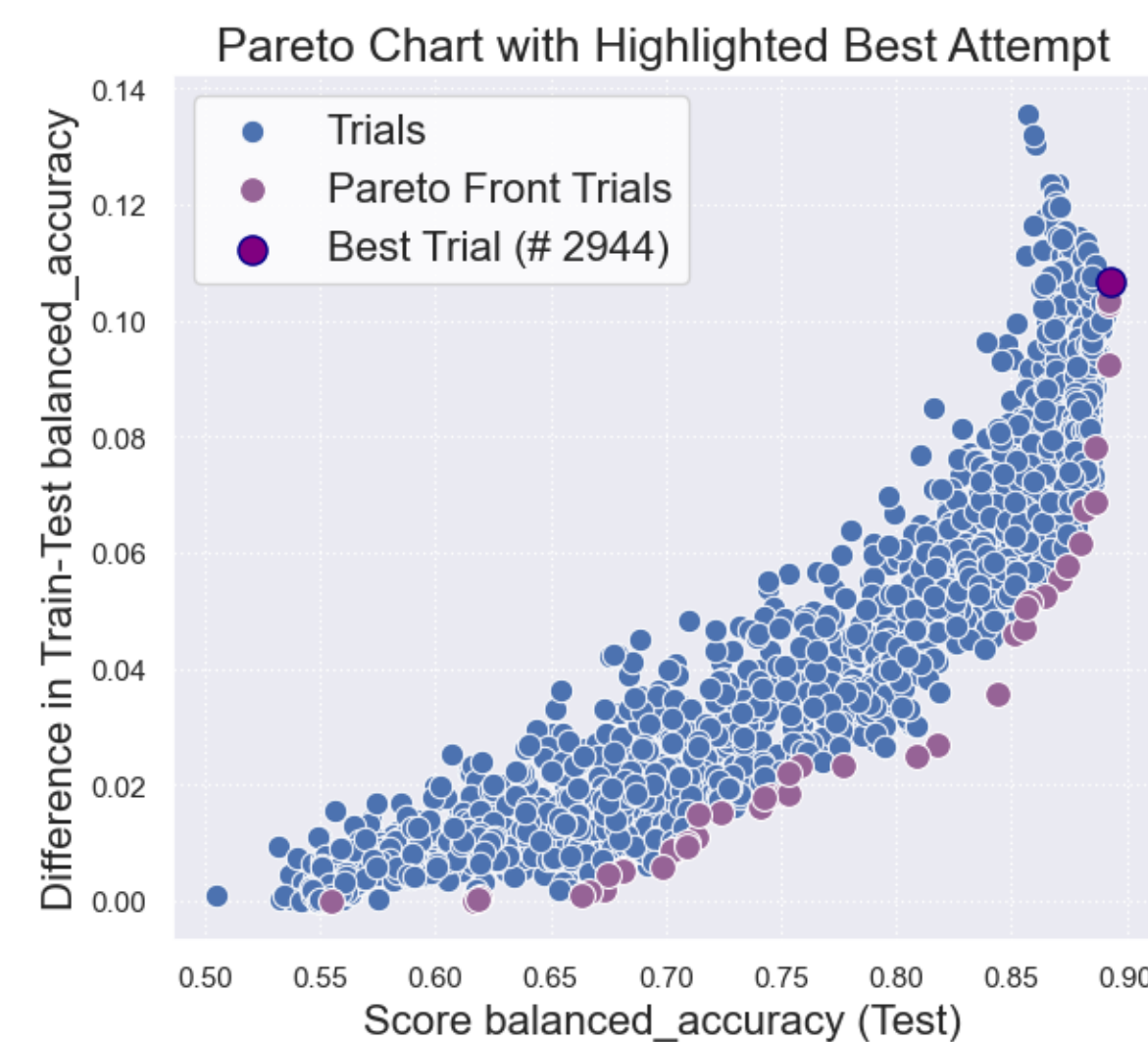
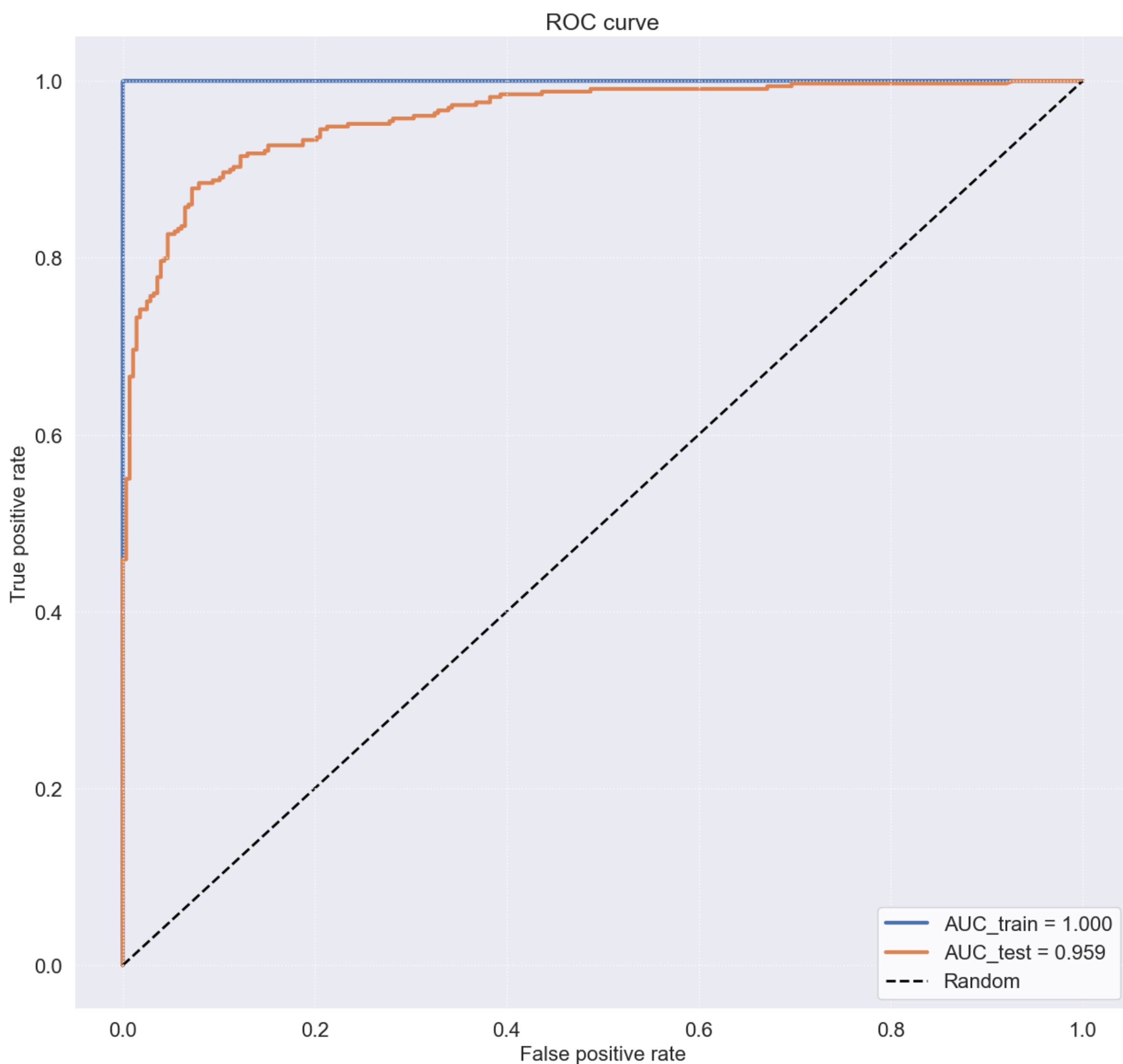
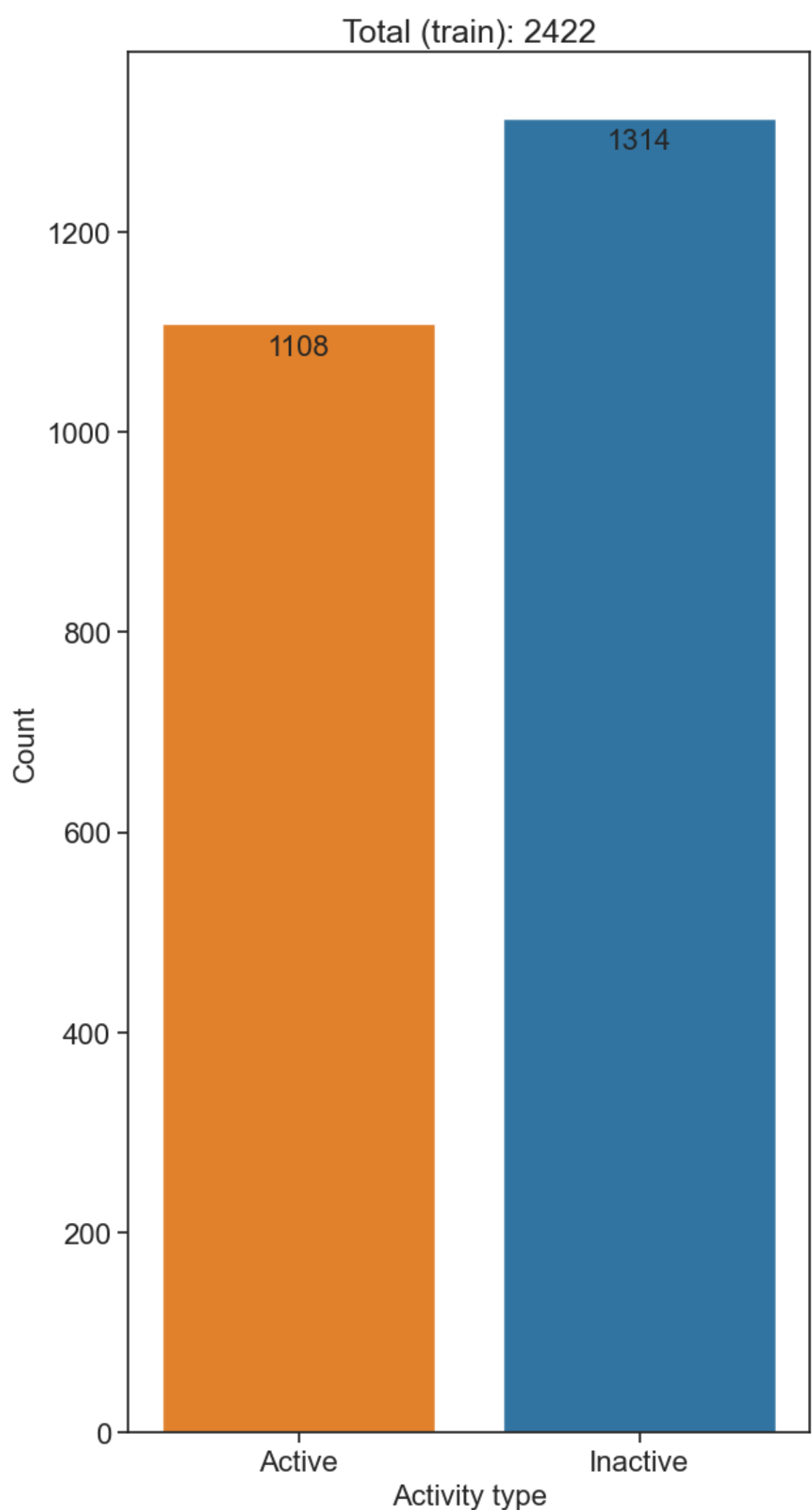
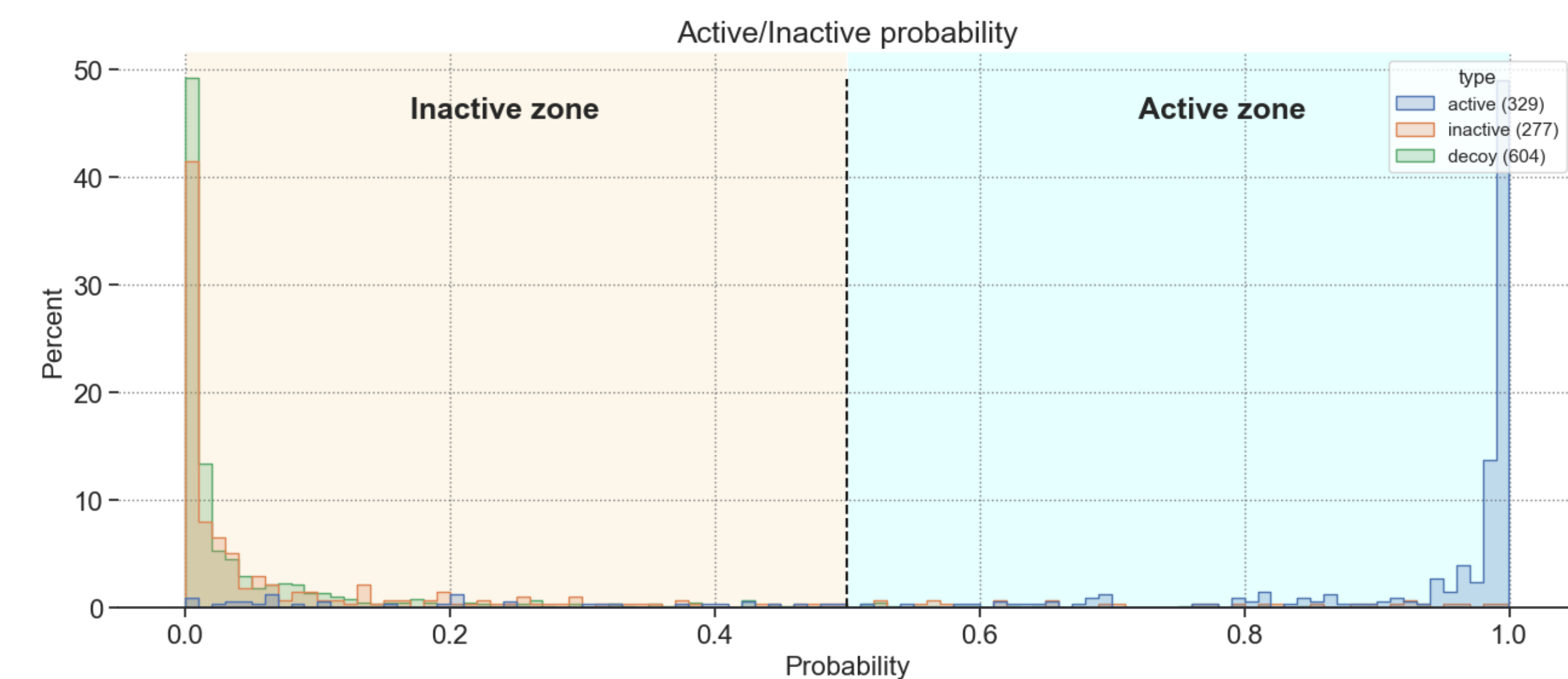
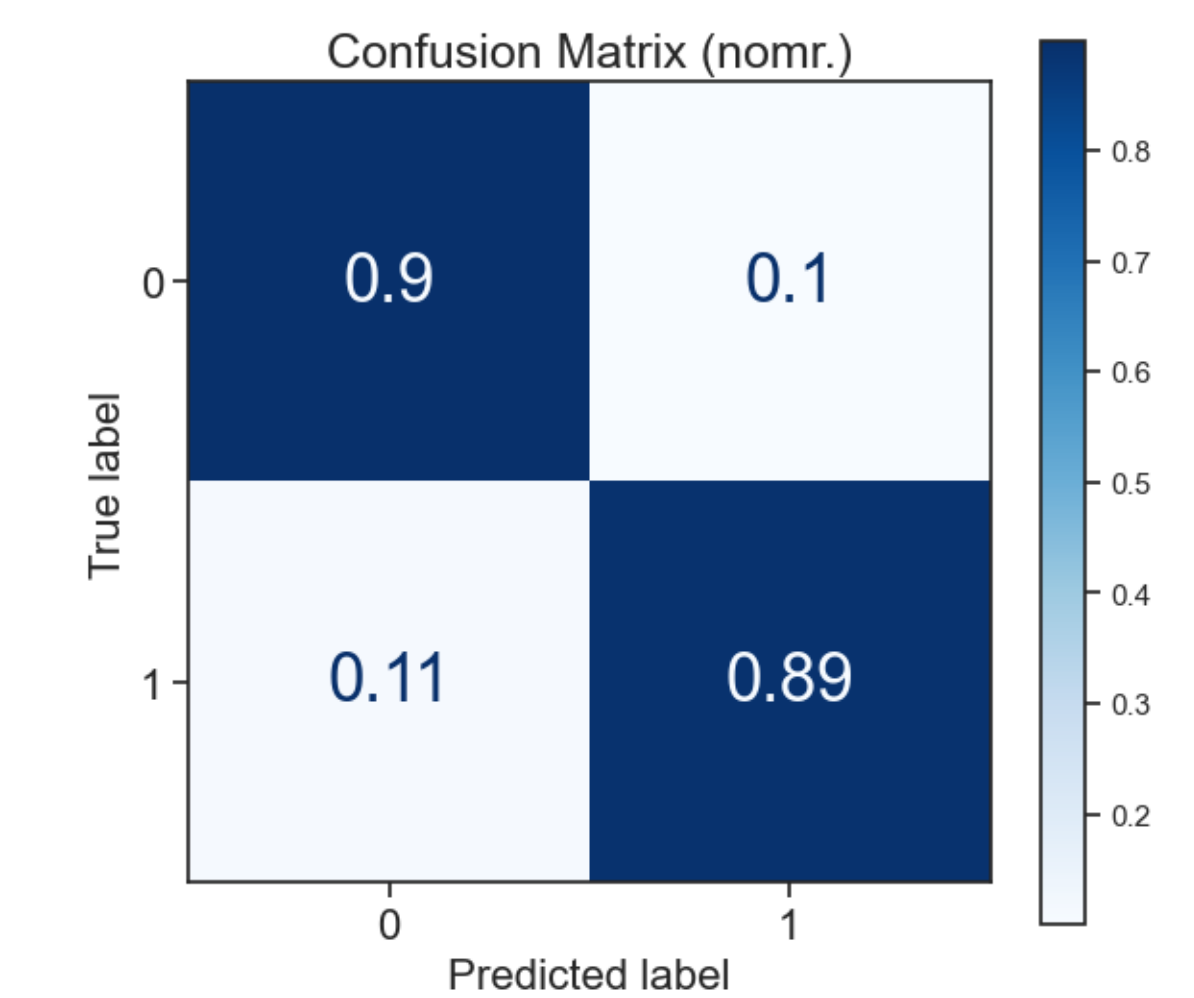
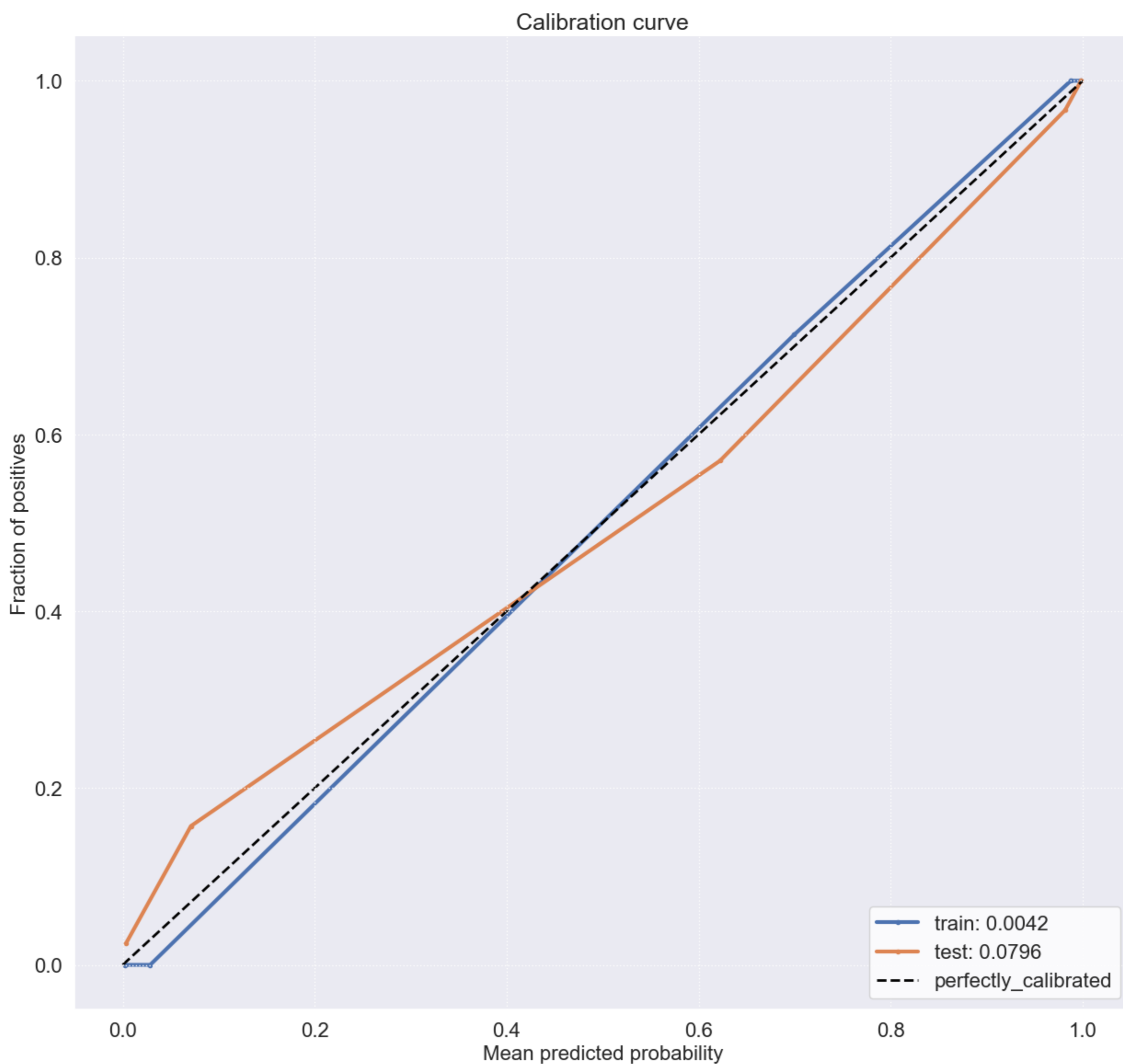
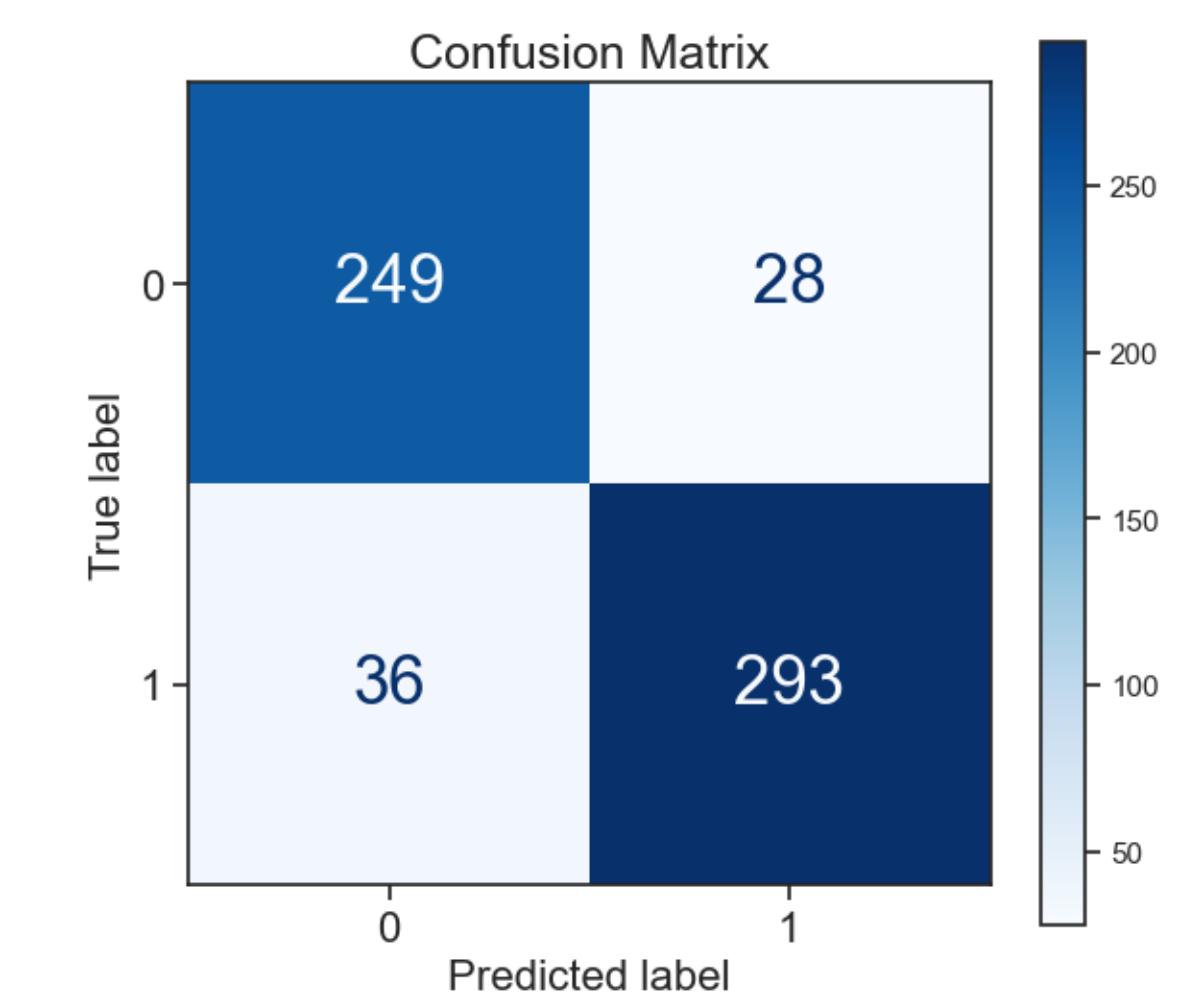


Protein: Q16539 - metric: balanced_accuracy

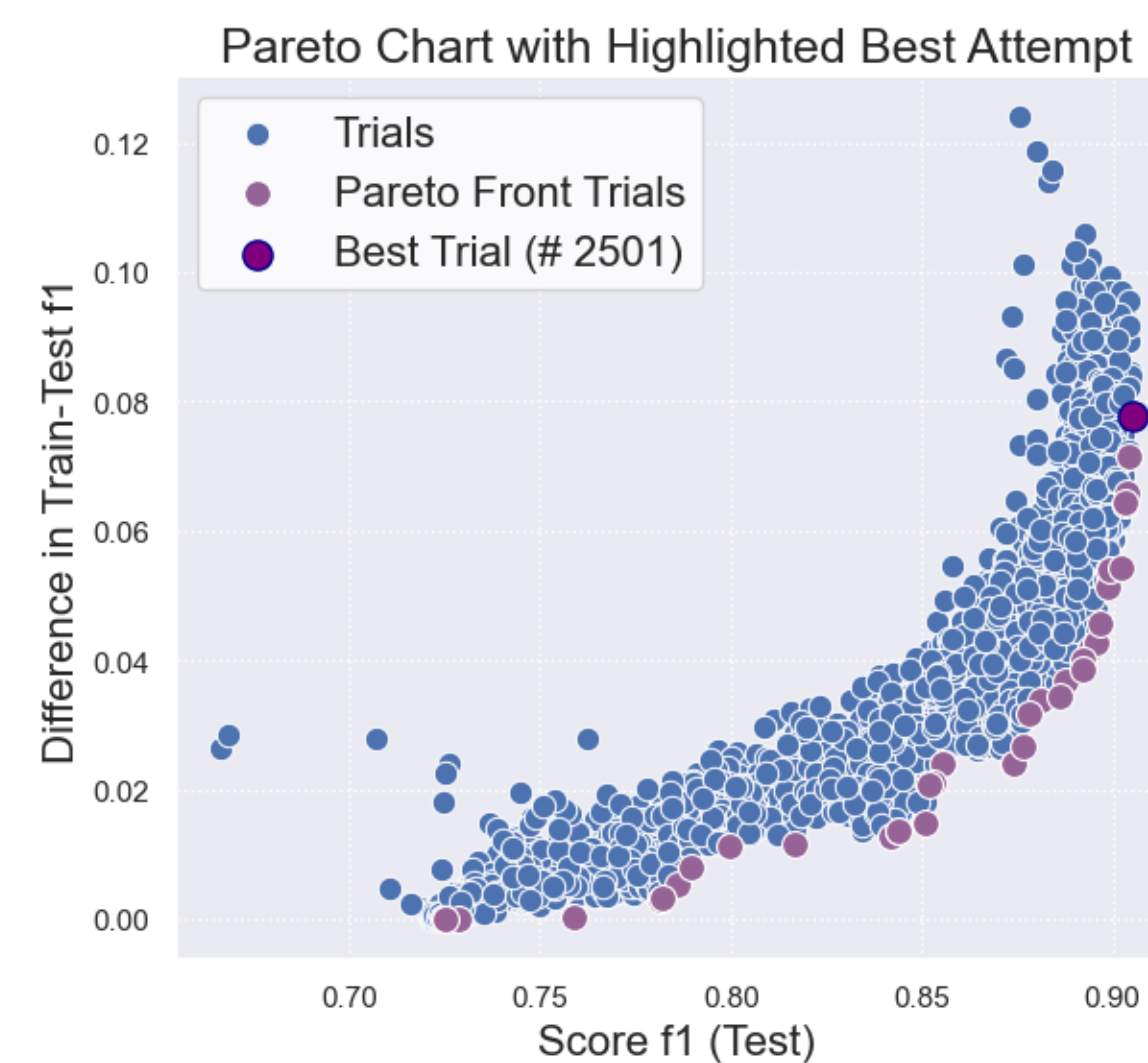
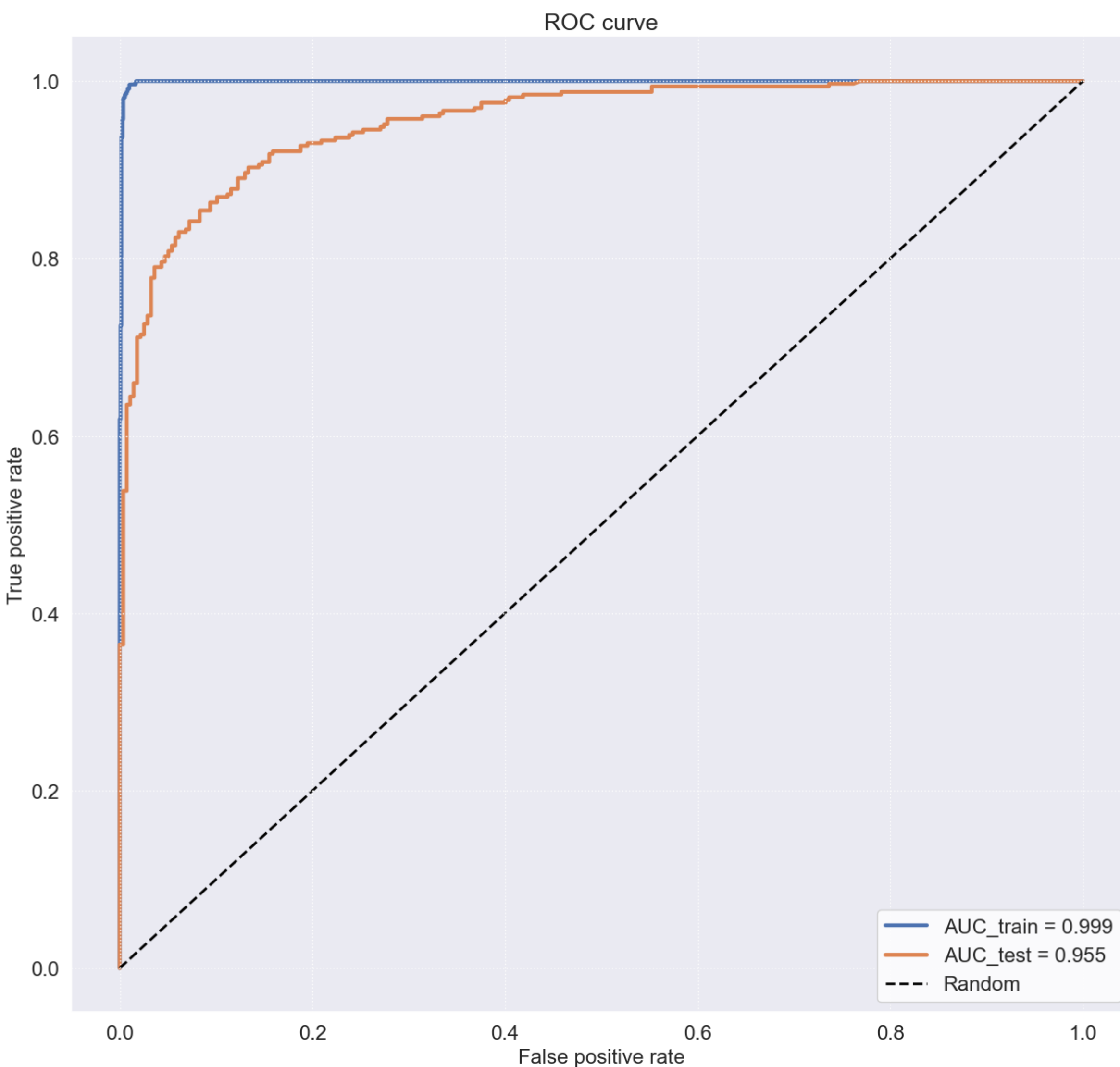
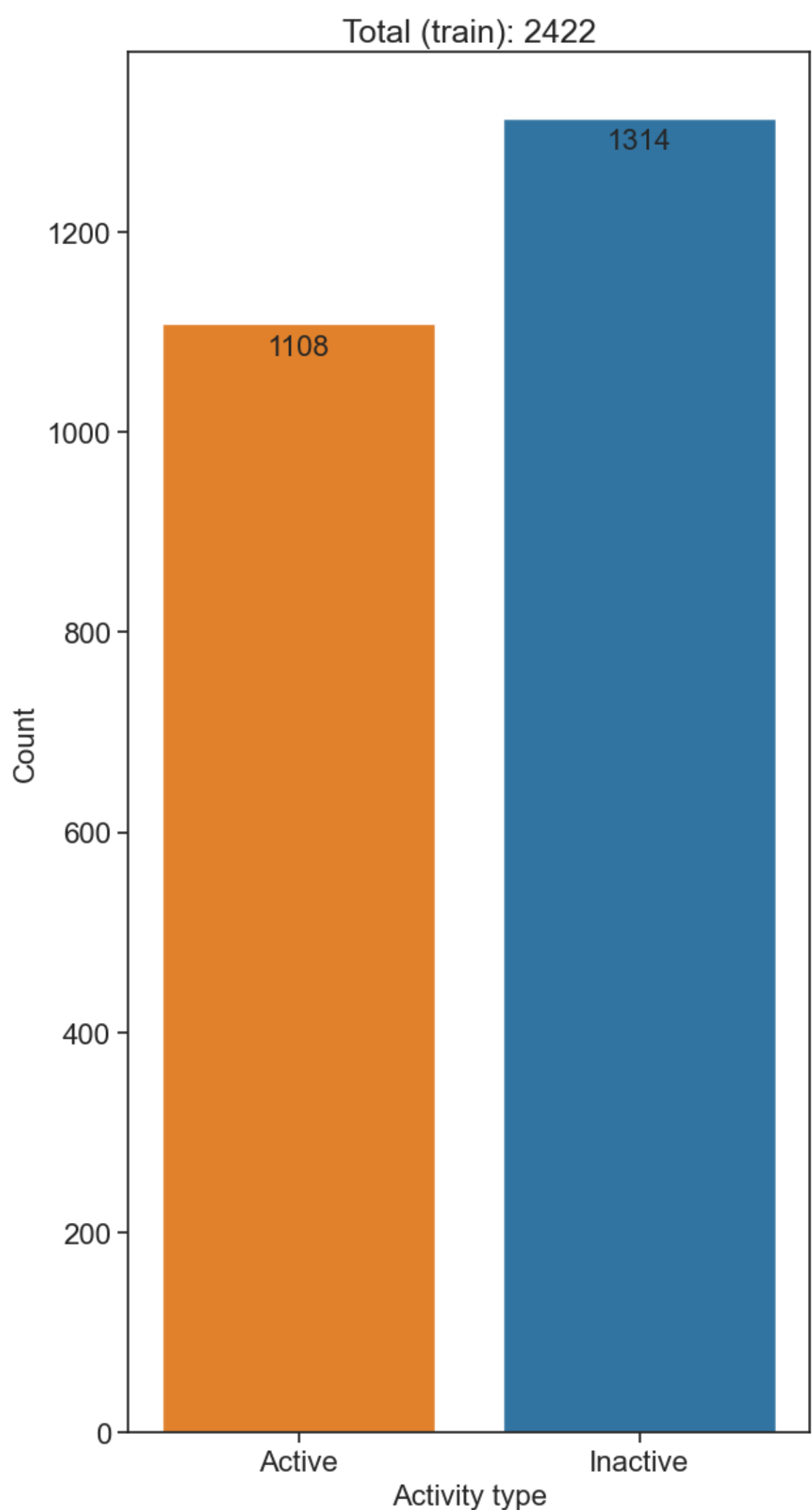


XGBoost Parameters	Value
alpha	1.7039
colsample_bytree	0.6115
gamma	0.0882
lambda	0.3286
learning_rate	0.0653
max_depth	9.0
min_child_weight	1.0
n_estimators	786.0
reg_alpha	0.3519
reg_lambda	0.2733
scale_pos_weight	1.0653
subsample	0.5434

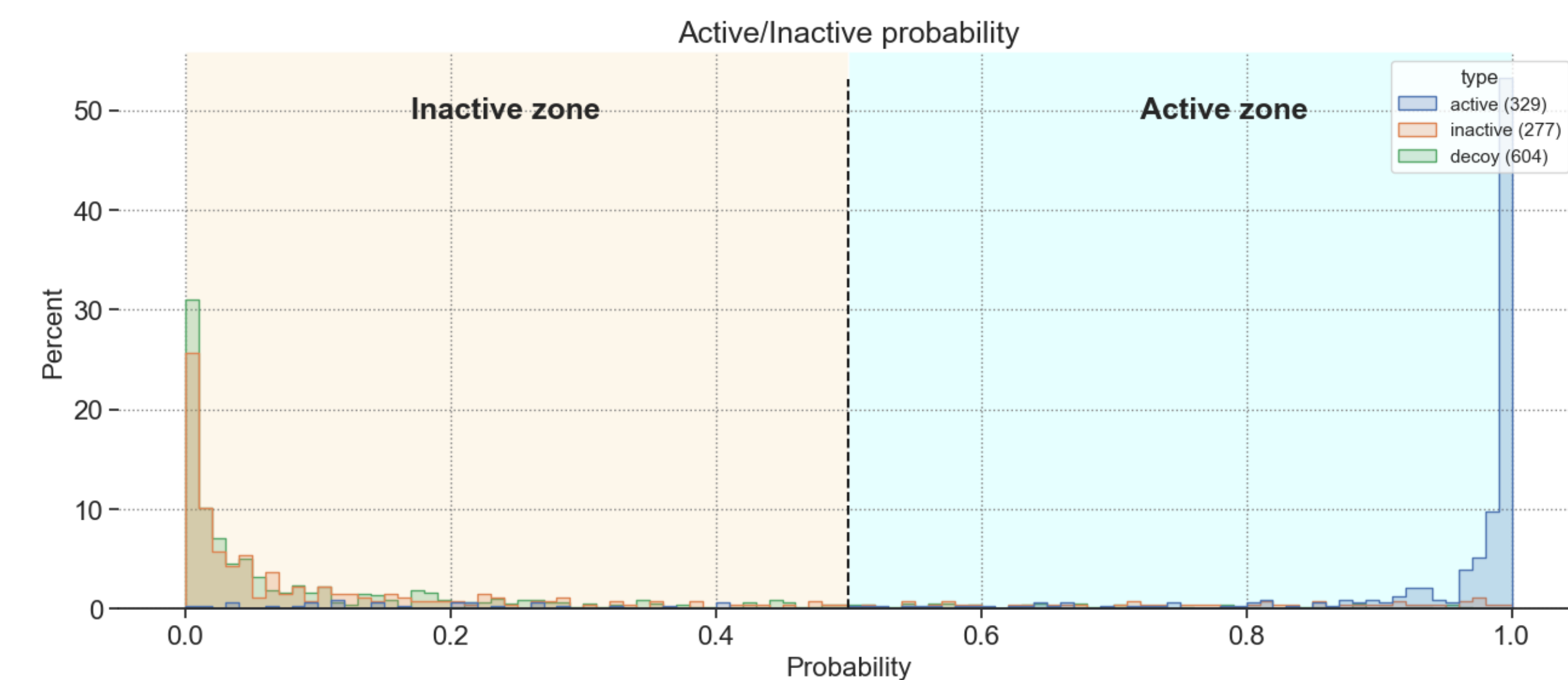
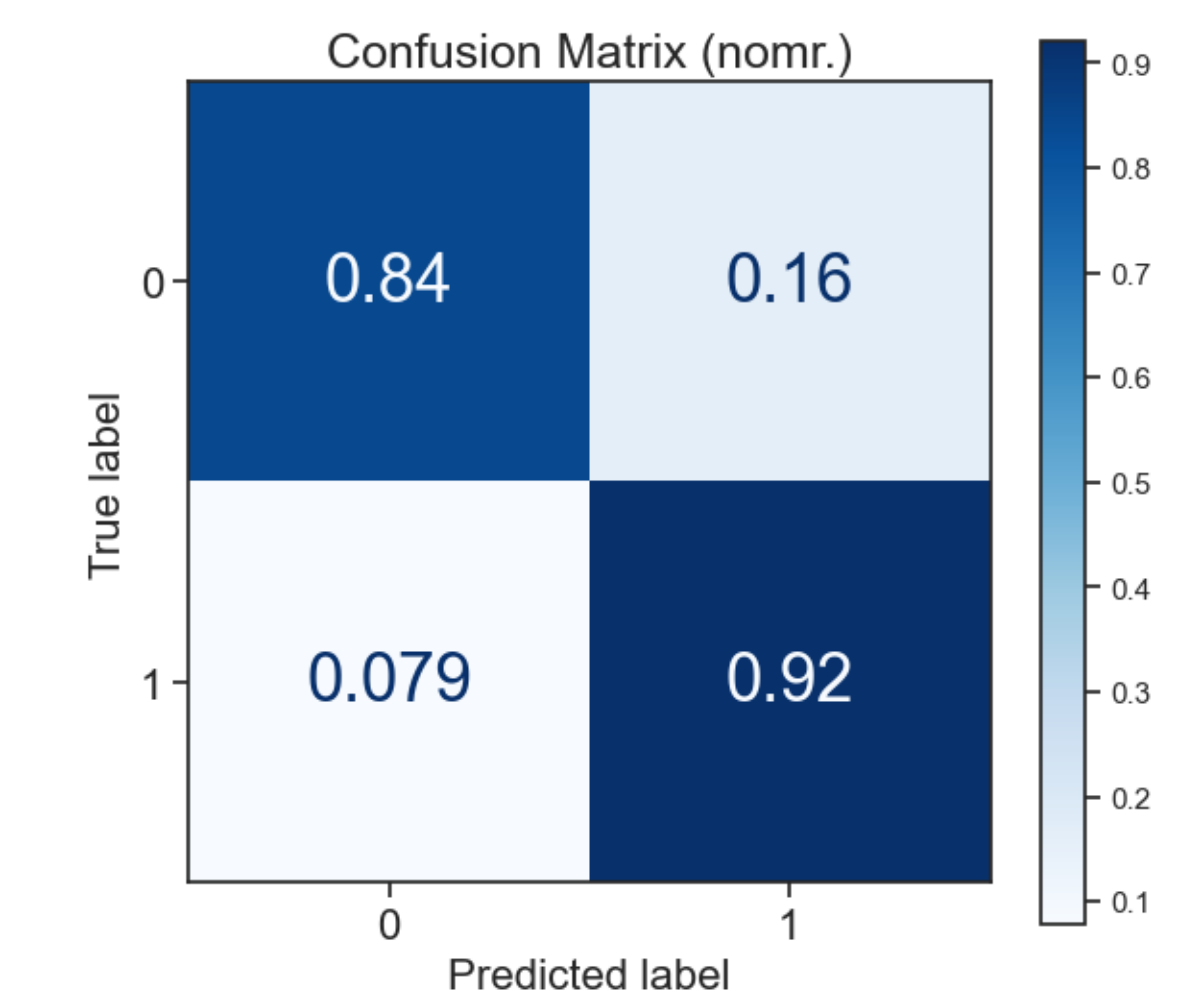
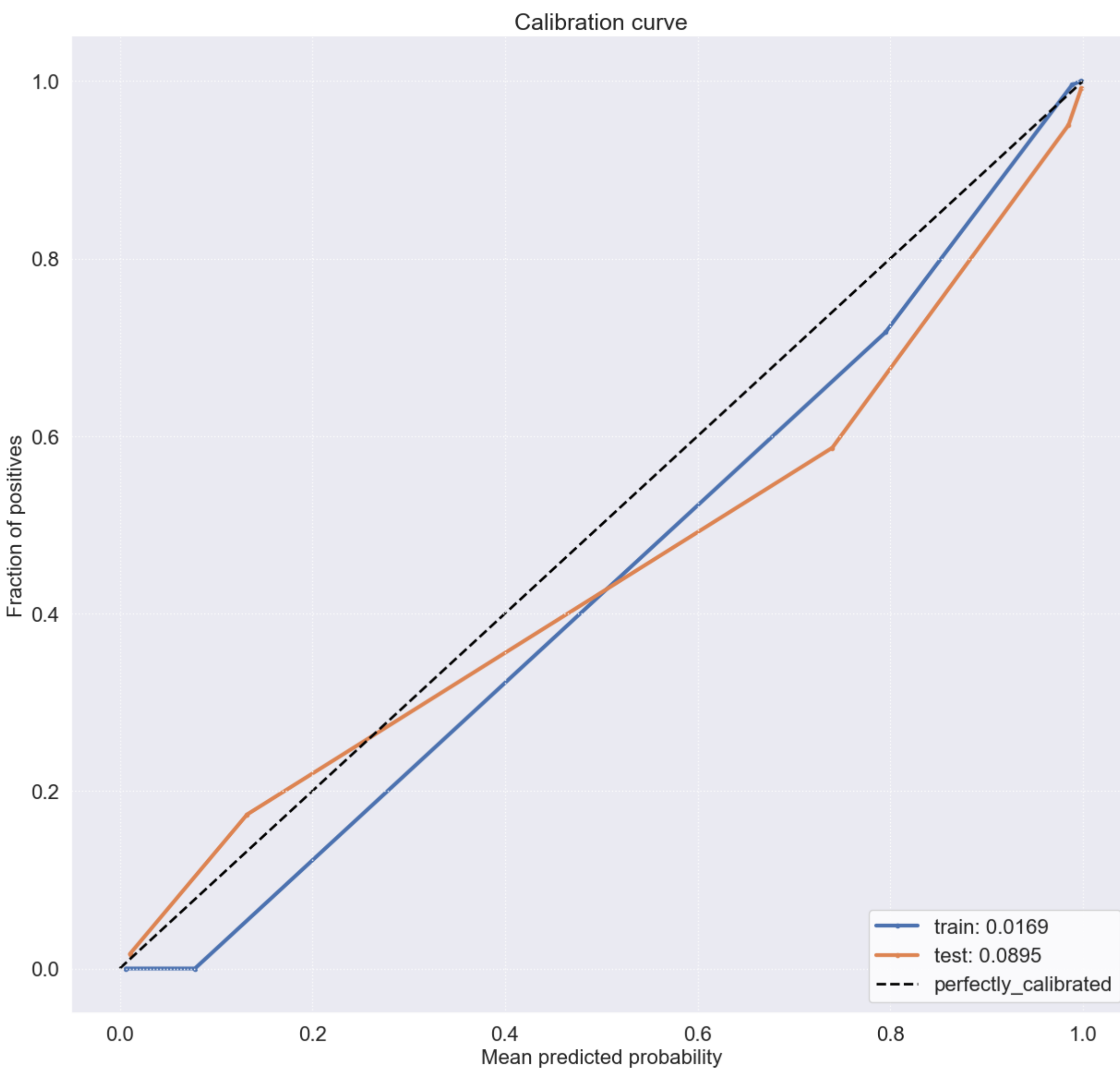
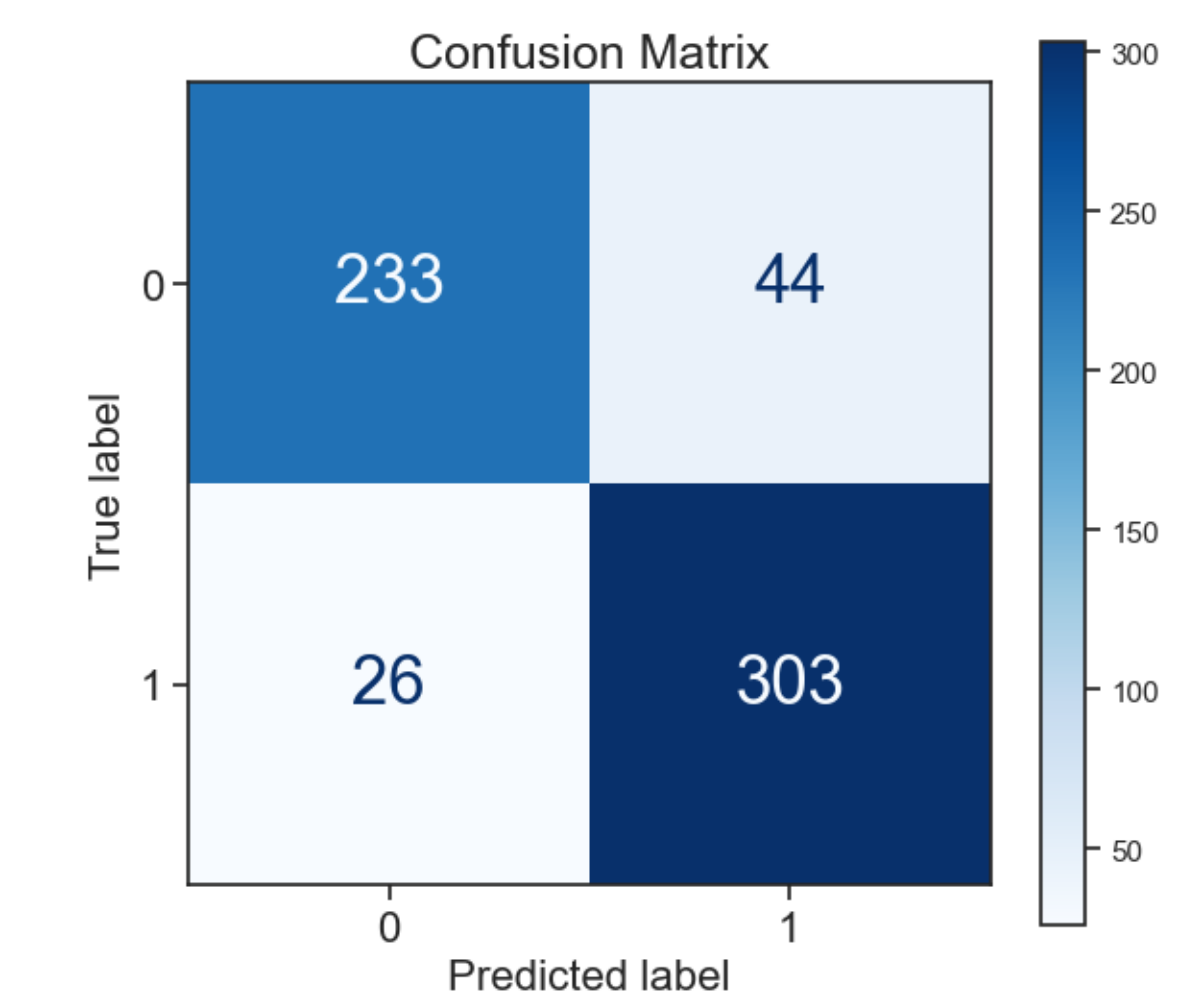


Metric	Train	Test
AUC	1.0	0.9593
accuracy	0.9996	0.8944
balanced accuracy	0.9995	0.8947
recall_(sens)	1.0	0.8906
specificity	0.9991	0.8989
precision	0.9992	0.9128
f1_score	0.9996	0.8945

Protein: Q16539 - metric: f1

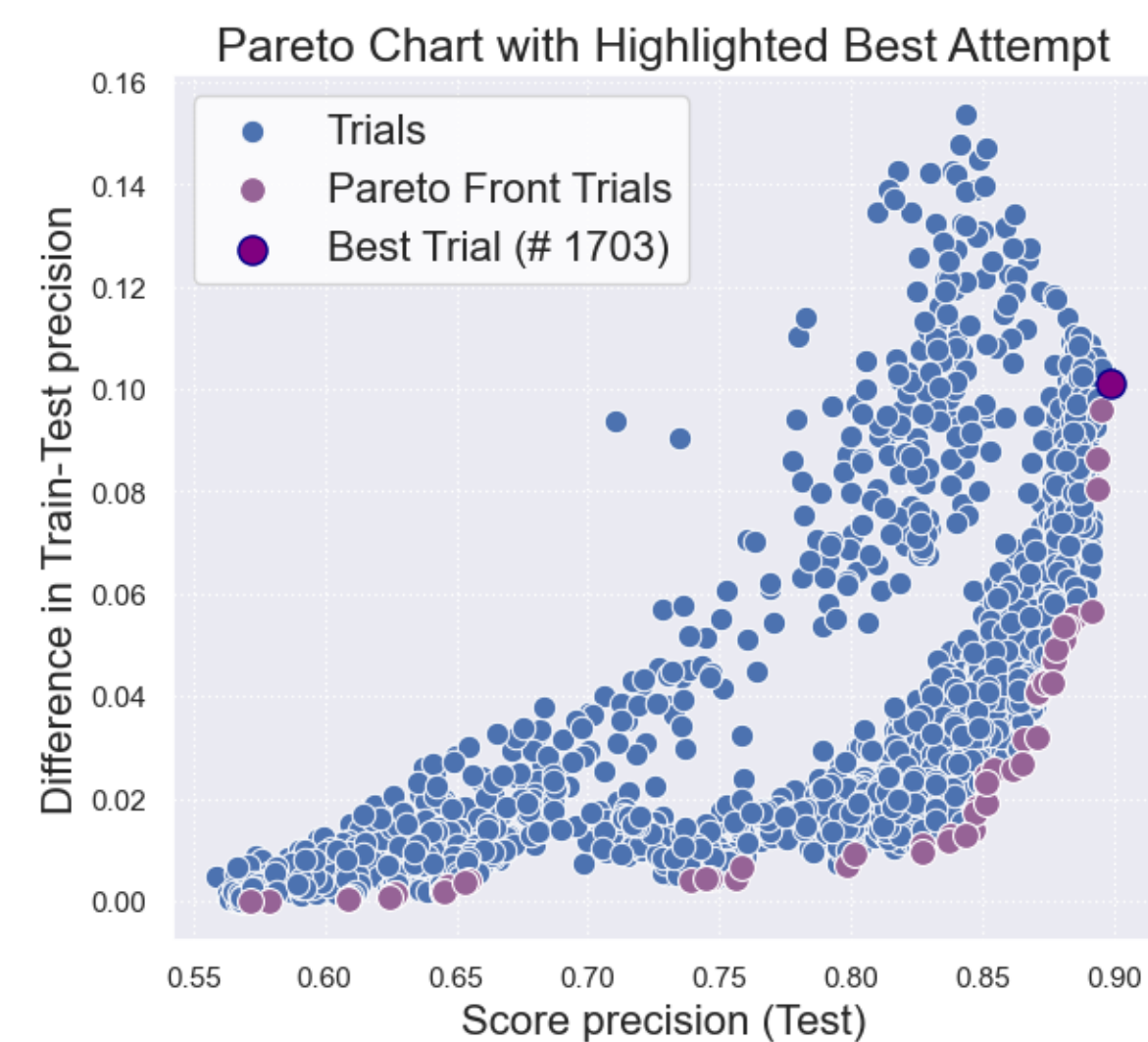
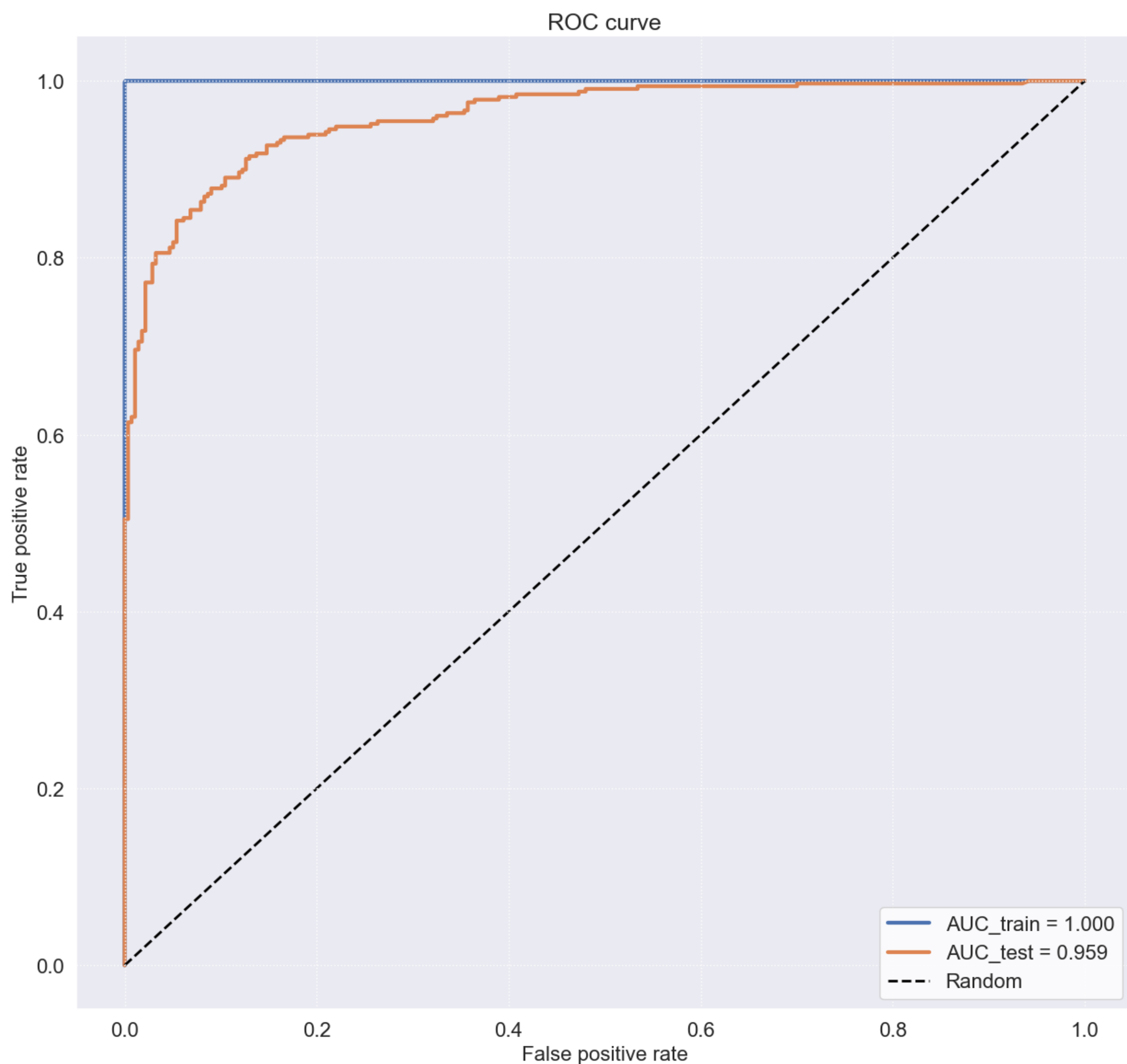
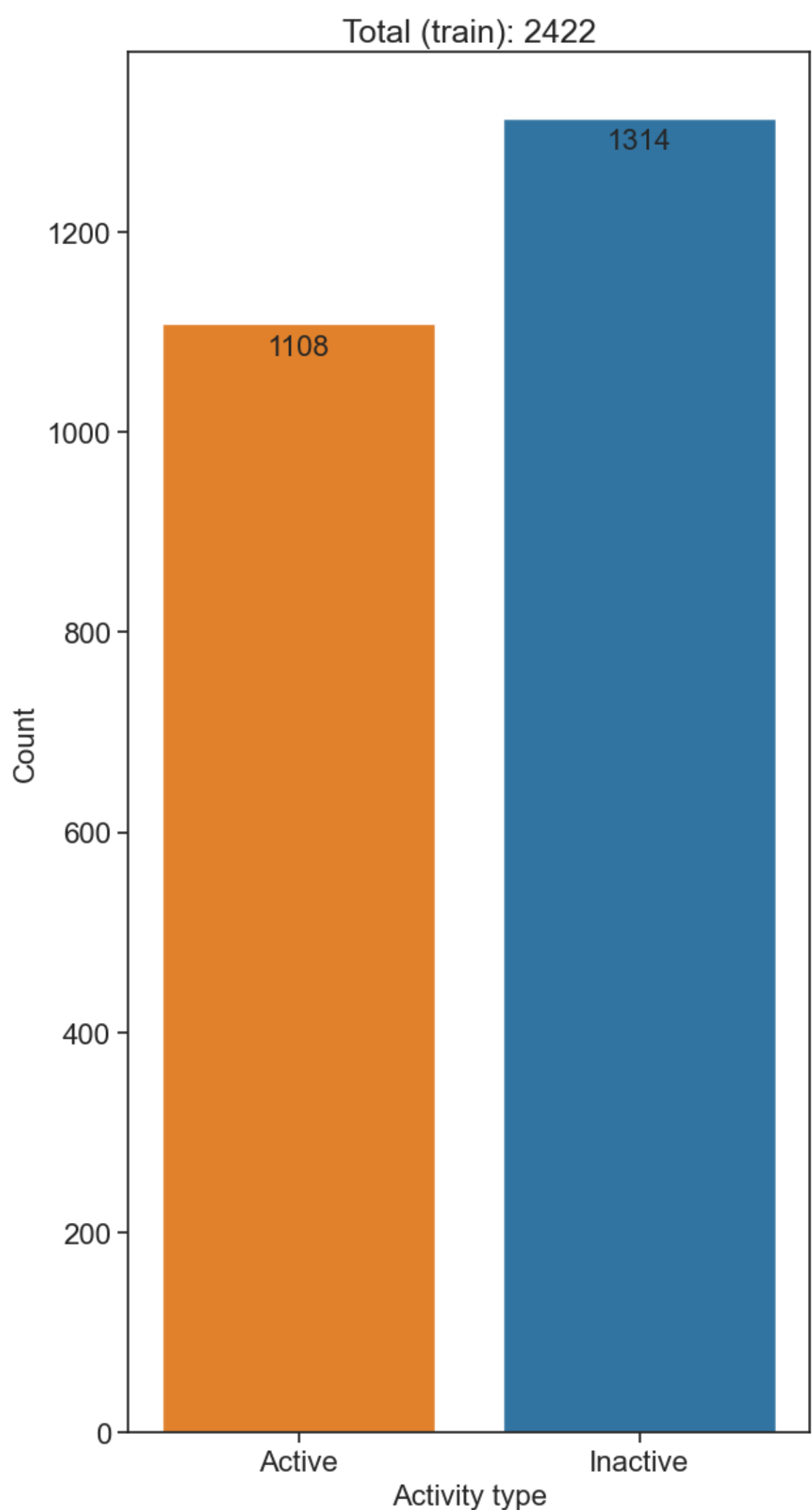


XGBoost Parameters	Value
alpha	4.92
colsample_bytree	0.7754
gamma	0.01
lambda	2.2124
learning_rate	0.0686
max_depth	10.0
min_child_weight	10.0
n_estimators	863.0
reg_alpha	0.1049
reg_lambda	0.634
scale_pos_weight	3.4759
subsample	0.8996

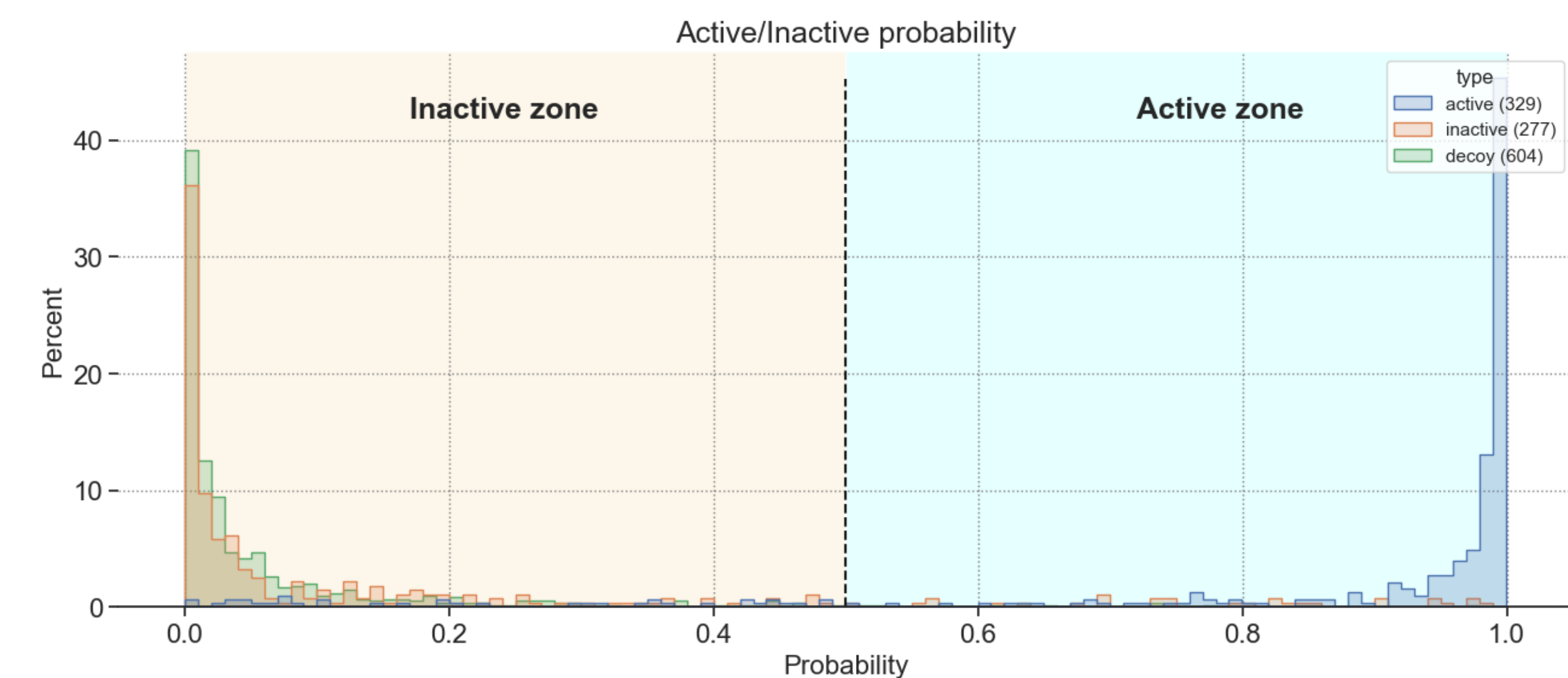
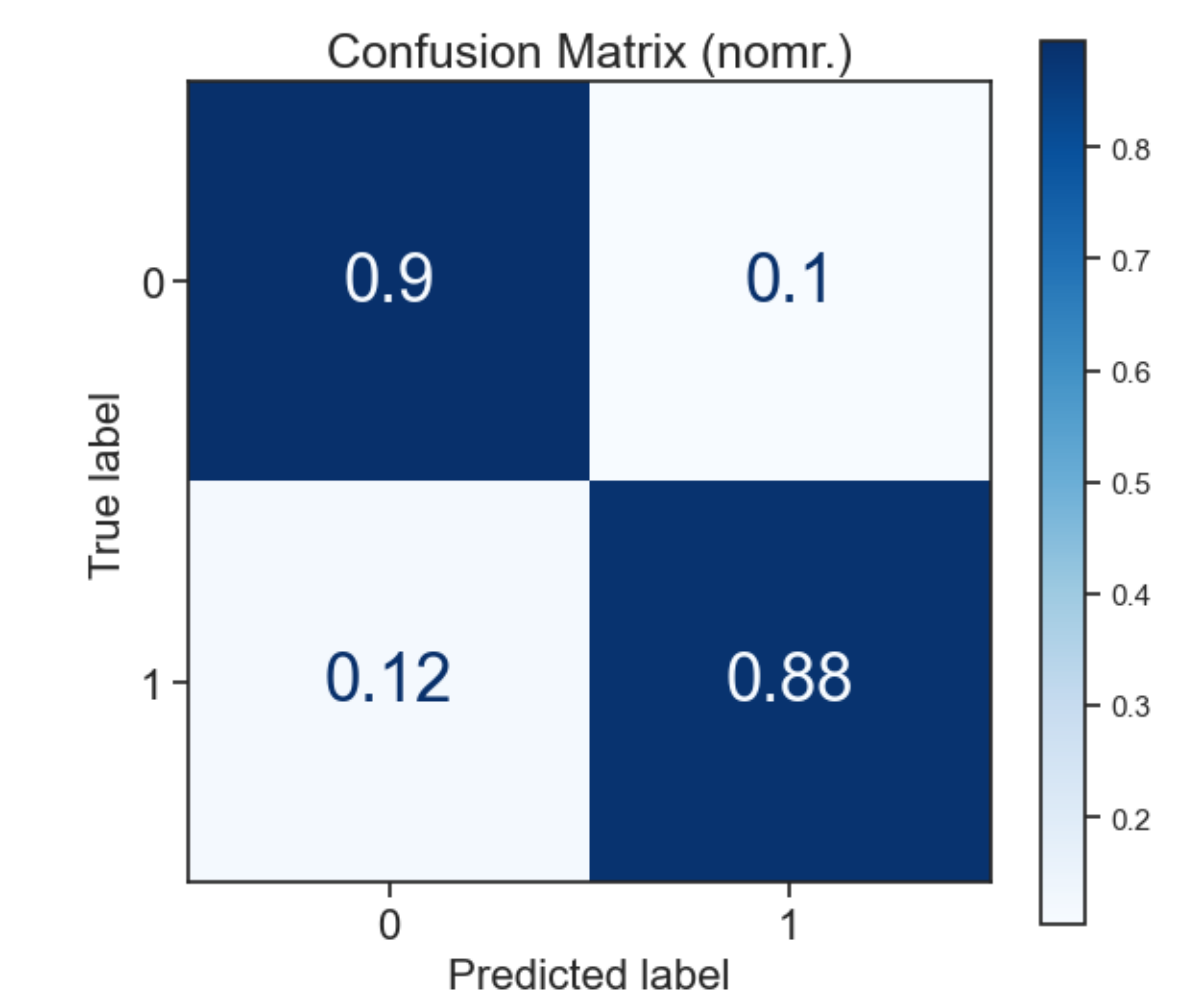
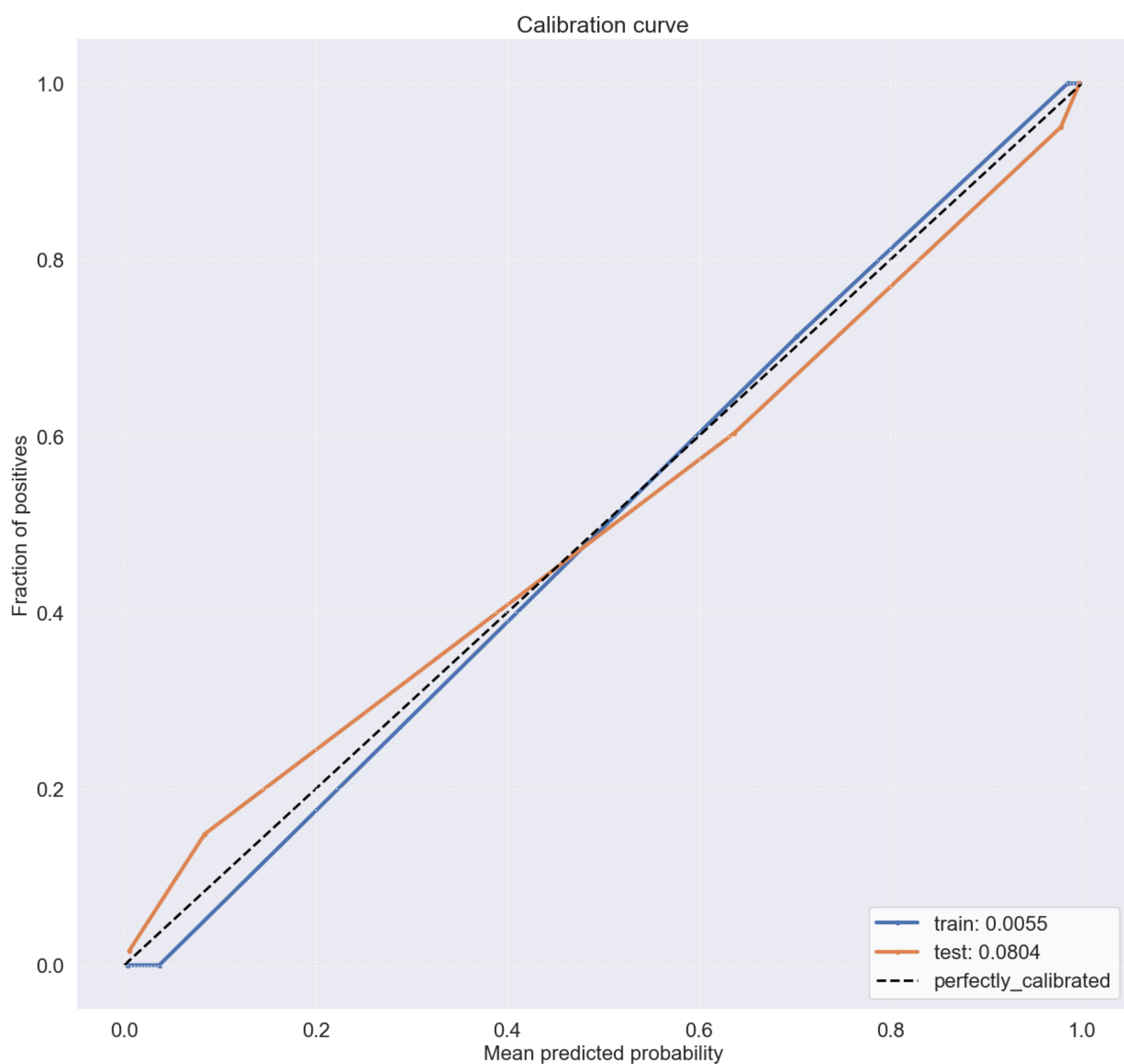
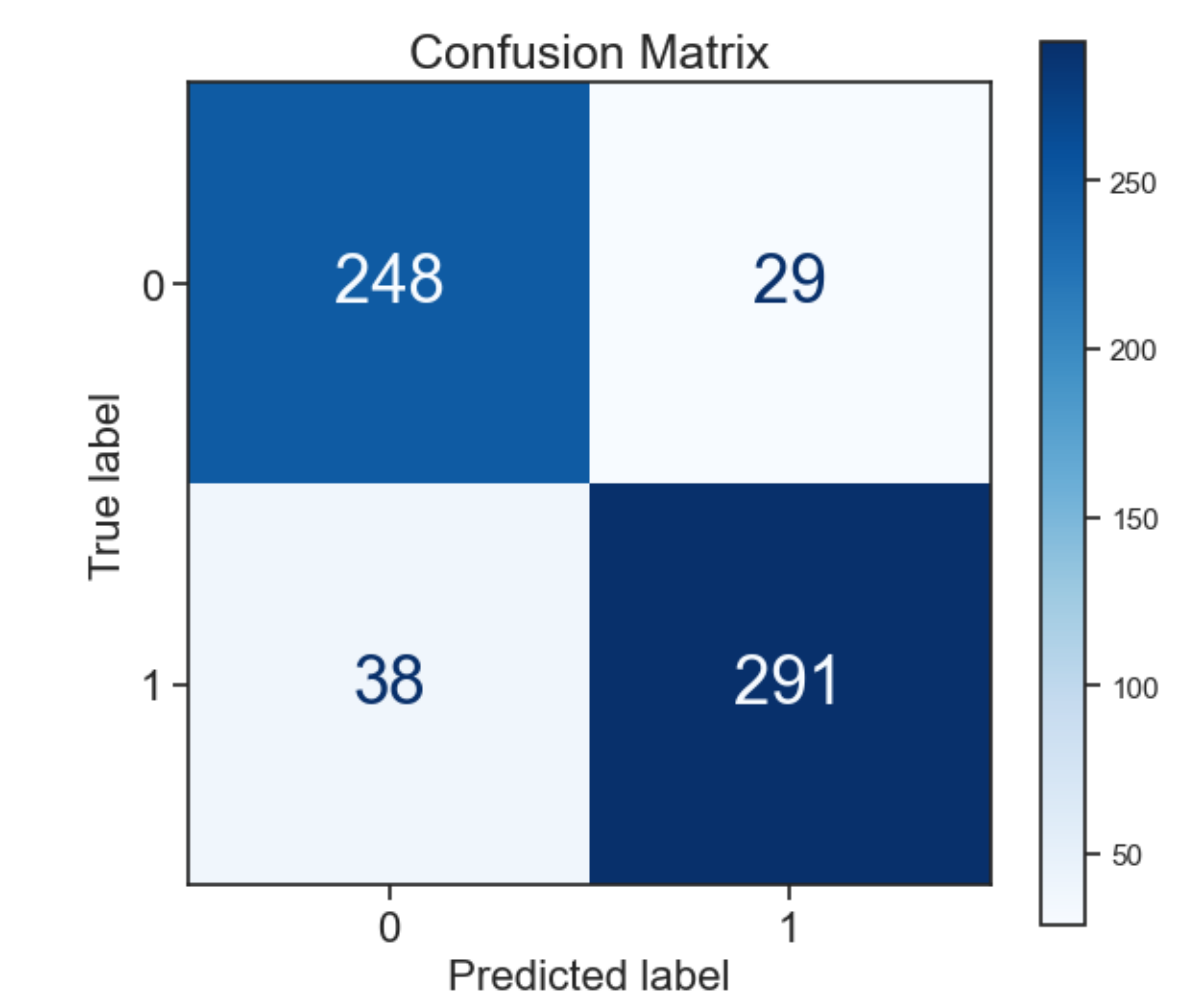


Metric	Train	Test
AUC	0.9992	0.9546
accuracy	0.9818	0.8845
balanced accuracy	0.9801	0.8811
recall_(sens)	1.0	0.921
specificity	0.9603	0.8412
precision	0.9676	0.8732
f1_score	0.9818	0.8841

Protein: Q16539 - metric: precision

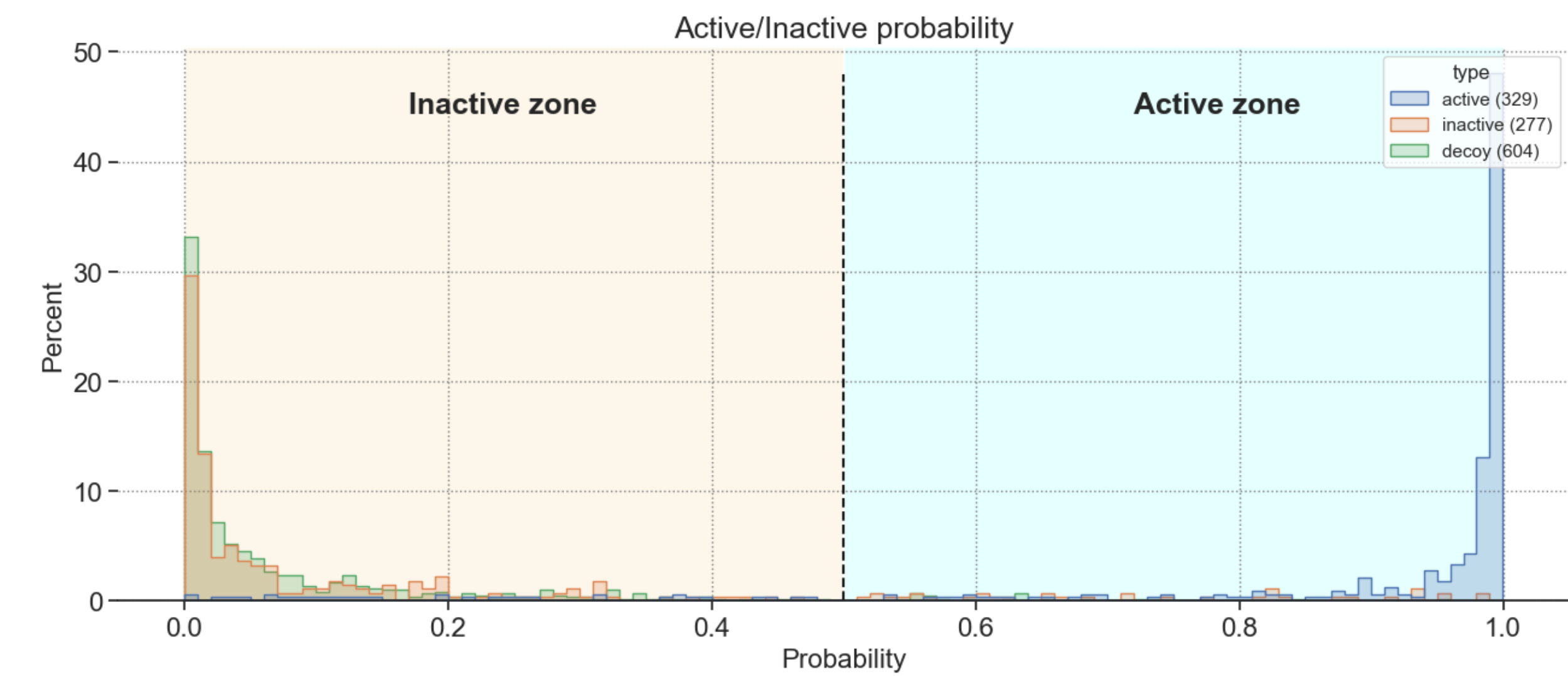
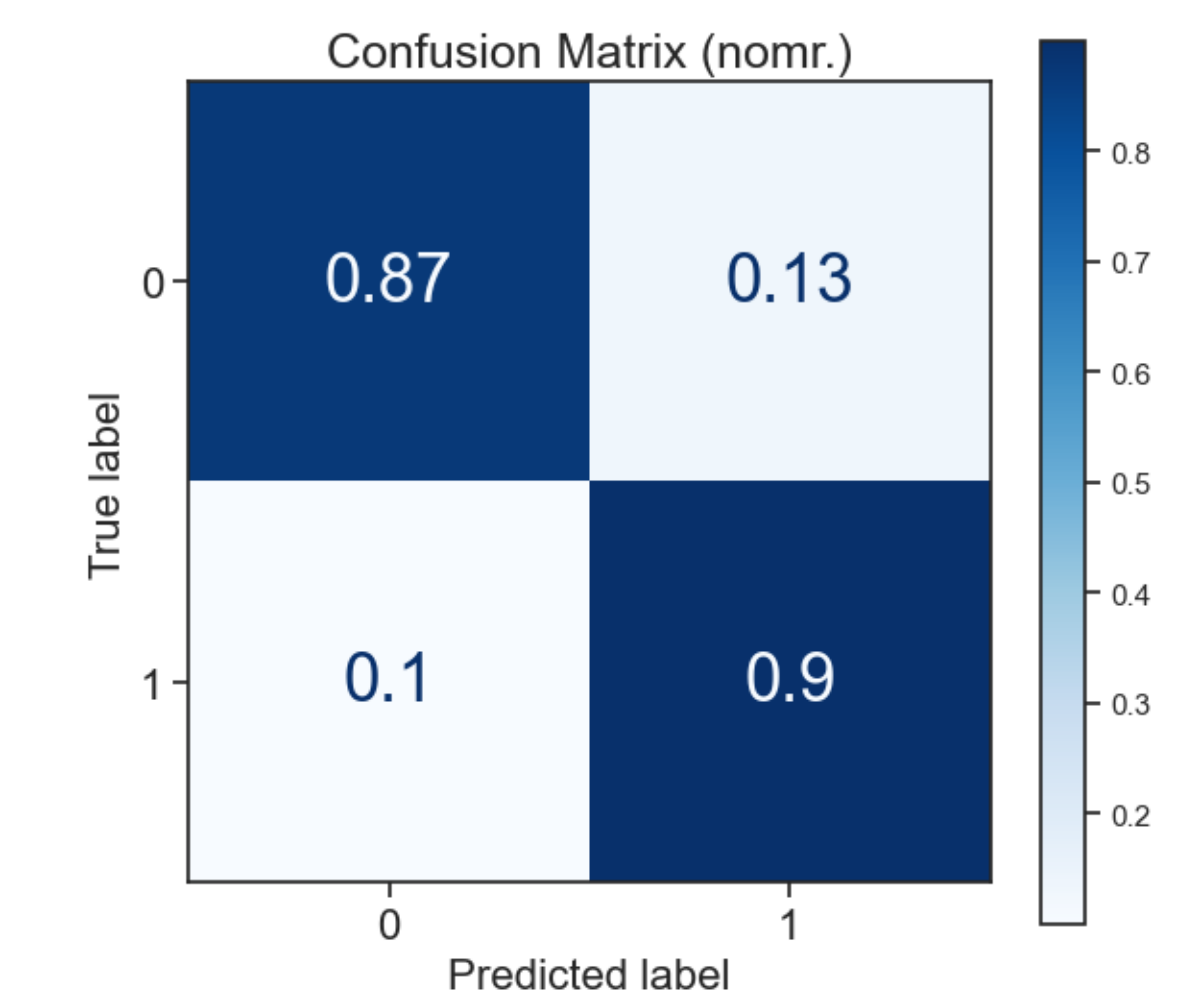
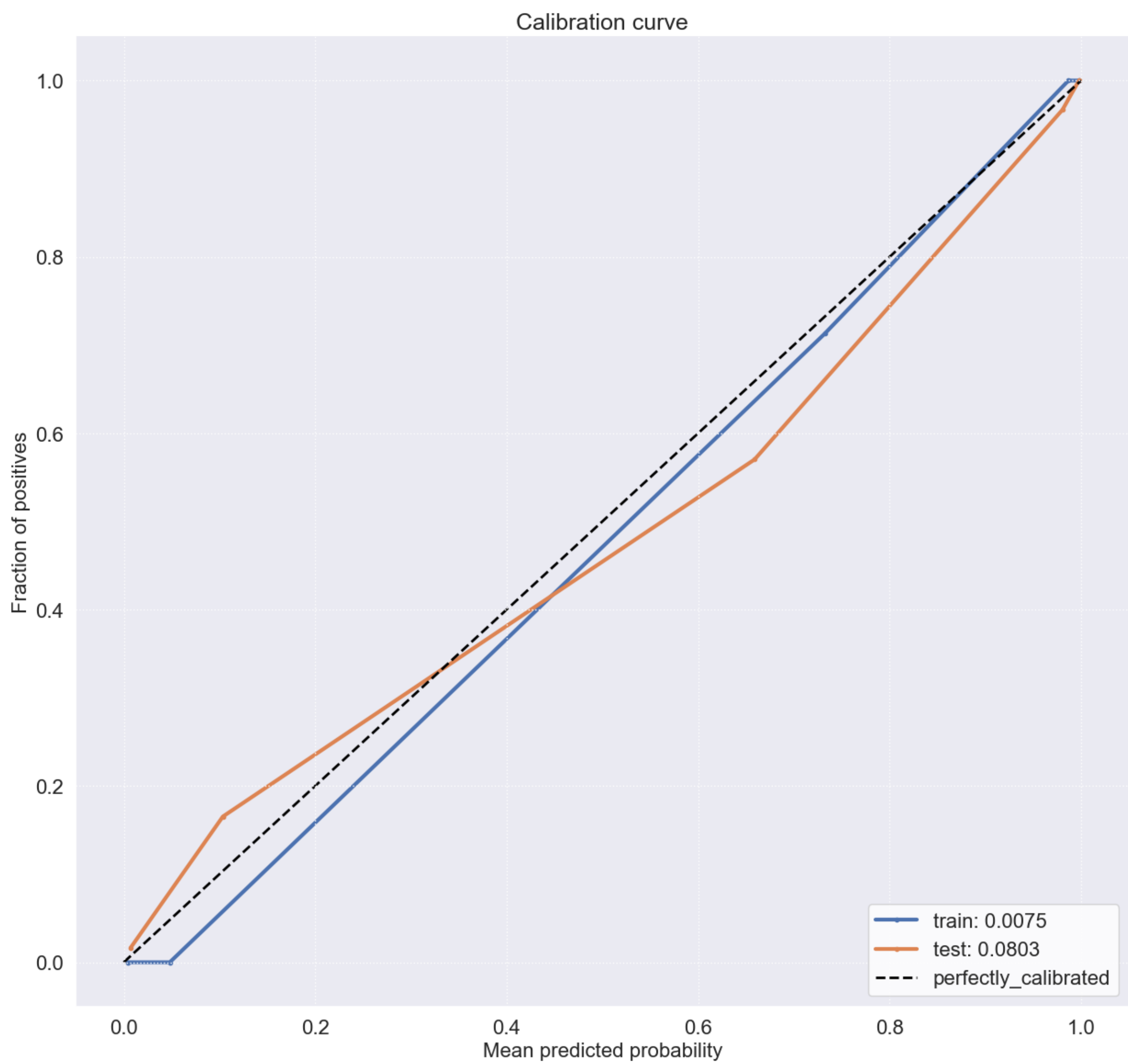
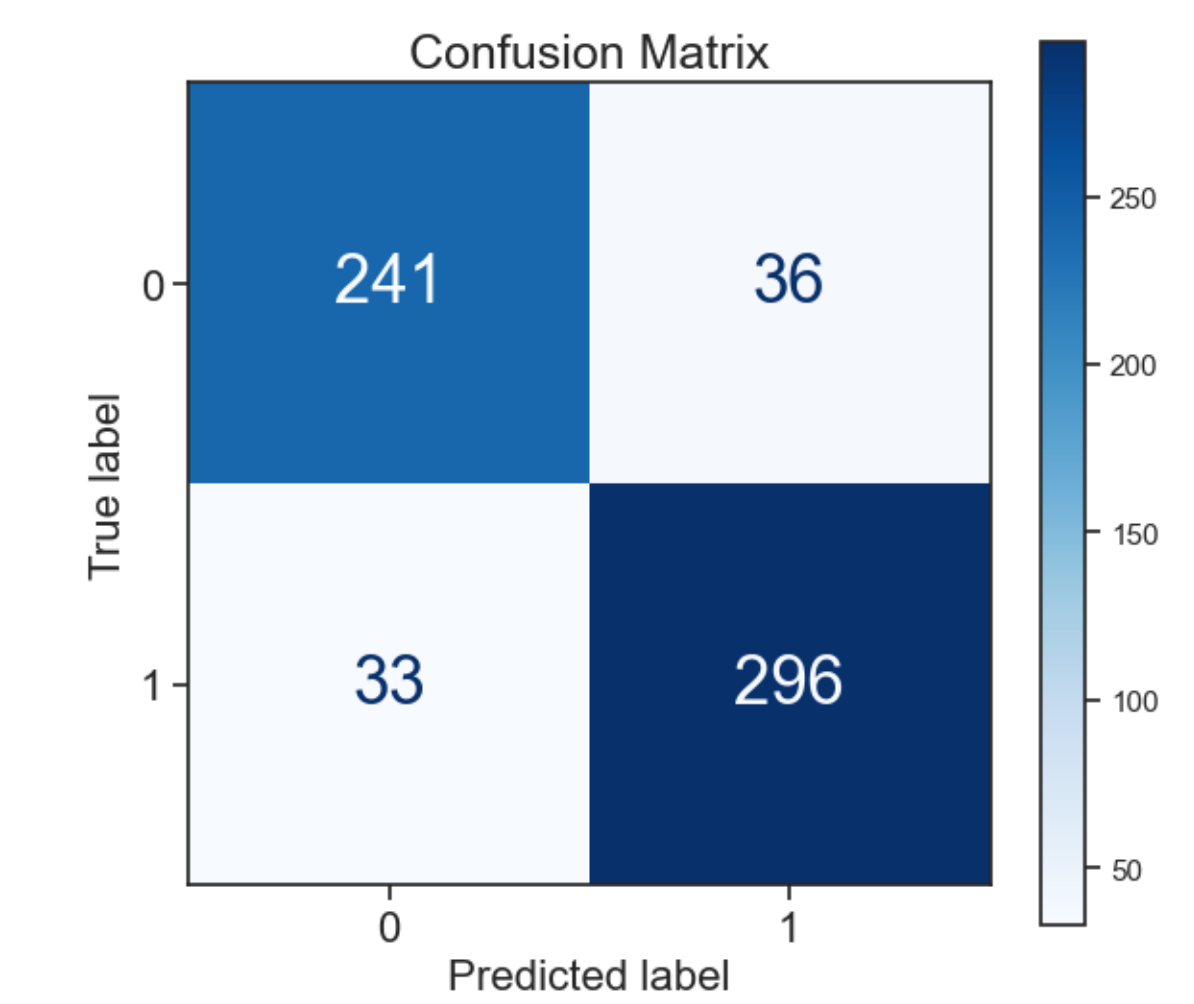
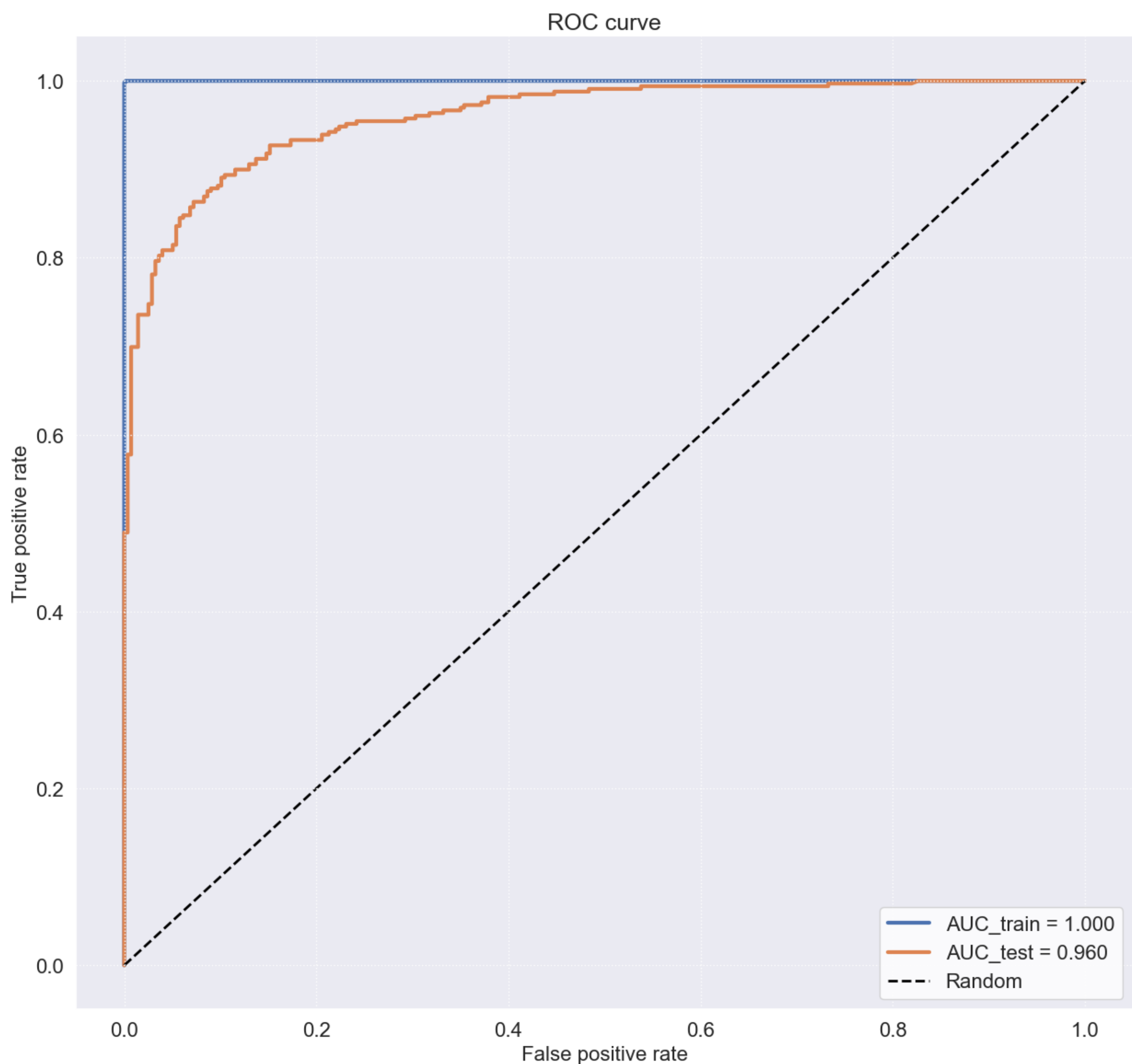
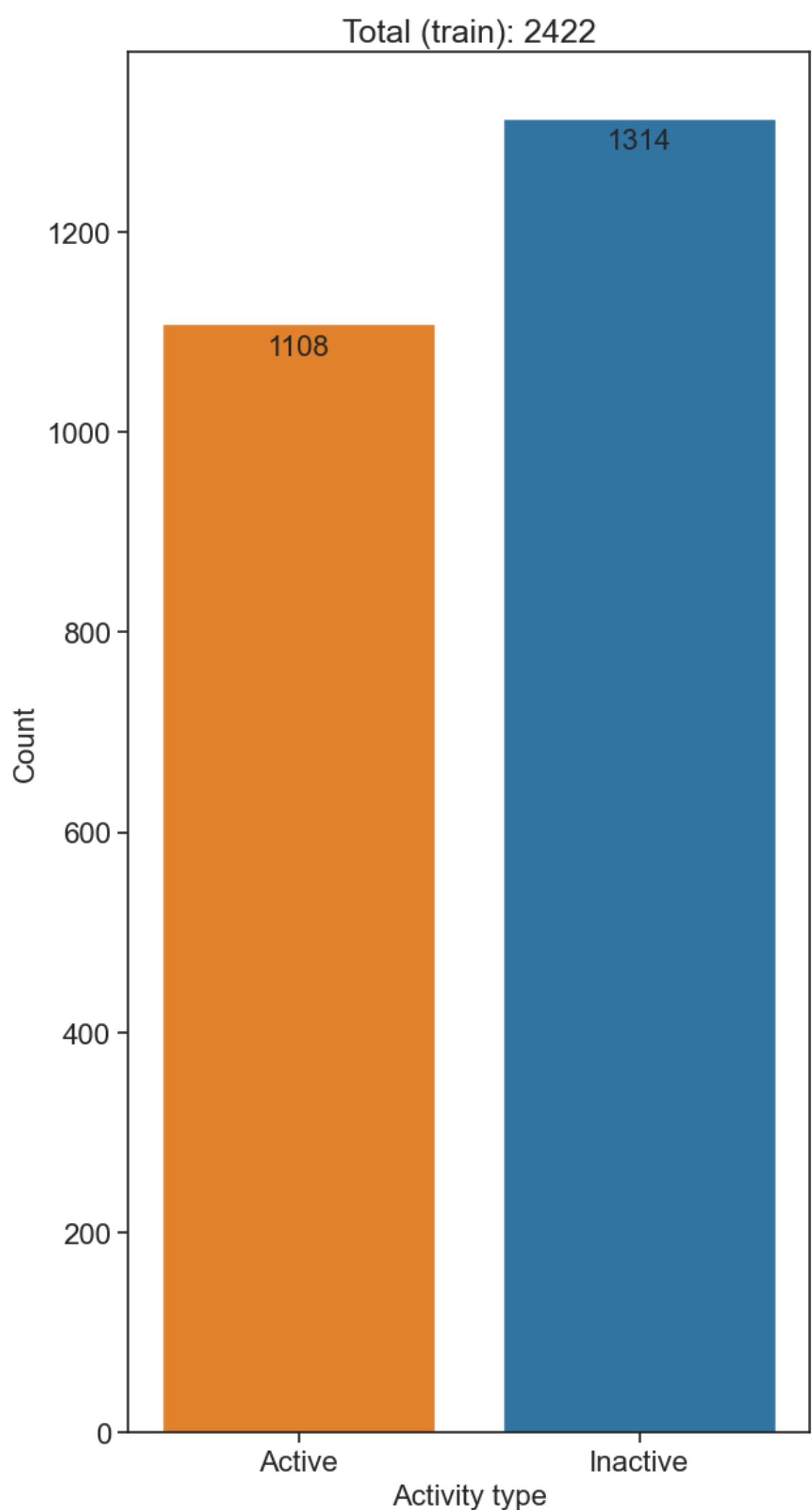


XGBoost Parameters		Value
alpha		3.2136
colsample_bytree		0.6343
gamma		0.273
lambda		2.392
learning_rate		0.0336
max_depth		10.0
min_child_weight		1.0
n_estimators		987.0
reg_alpha		0.1503
reg_lambda		0.2126
scale_pos_weight		1.1392
subsample		0.6139



Metric	Train	Test
AUC	1.0	0.9594
accuracy	0.9992	0.8894
balanced accuracy	0.9992	0.8899
recall_(sens)	0.9992	0.8845
specificity	0.9991	0.8953
precision	0.9992	0.9094
f1_score	0.9992	0.8896

Protein: Q16539 - metric: SoftVotingXGBoostEnsemble



Metric	Train	Test
AUC	1.0	0.9598
accuracy	0.9959	0.8861
balanced accuracy	0.9955	0.8849
recall_(sens)	1.0	0.8997
specificity	0.991	0.87
precision	0.9924	0.8916
f1_score	0.9959	0.8861