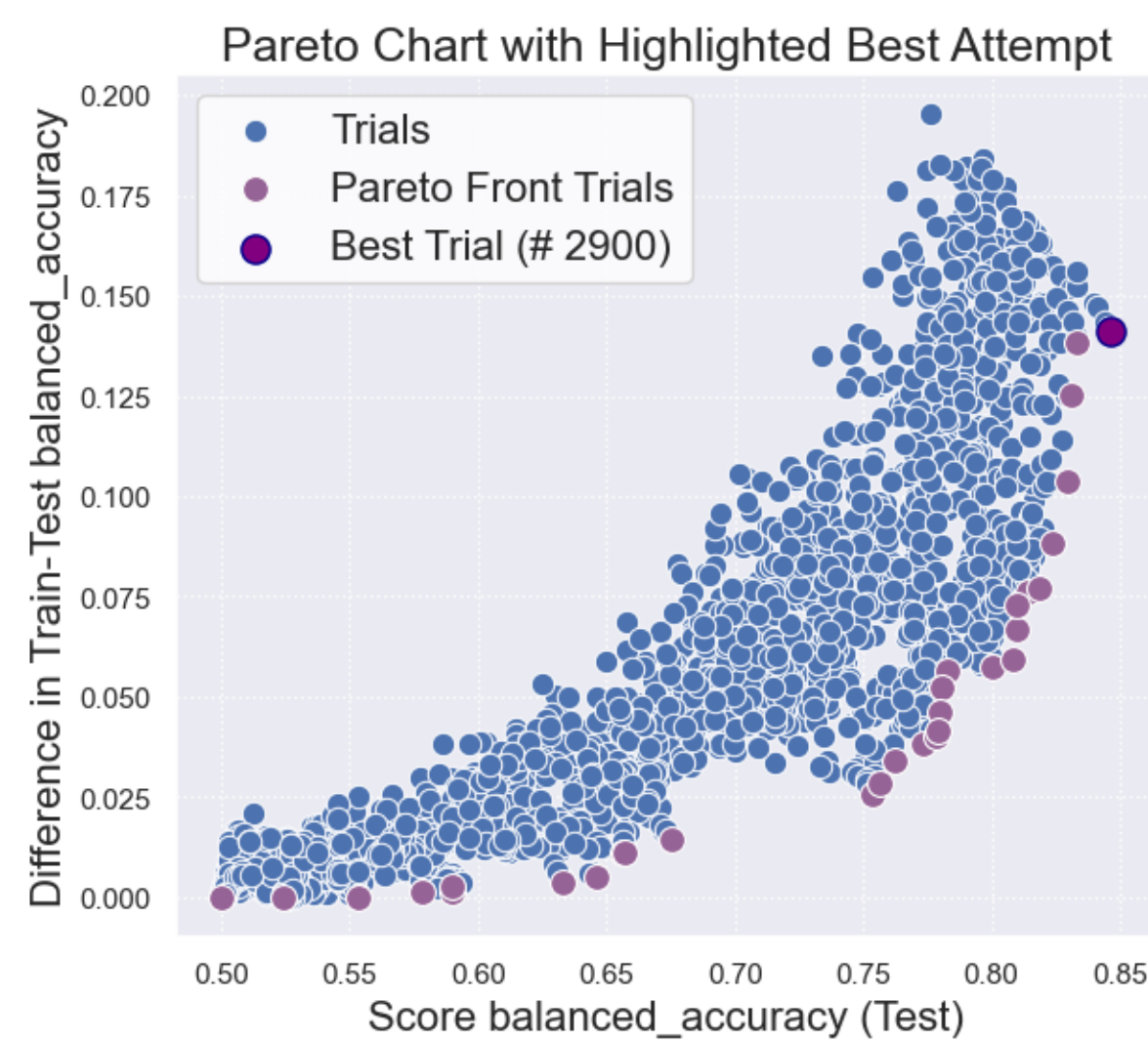
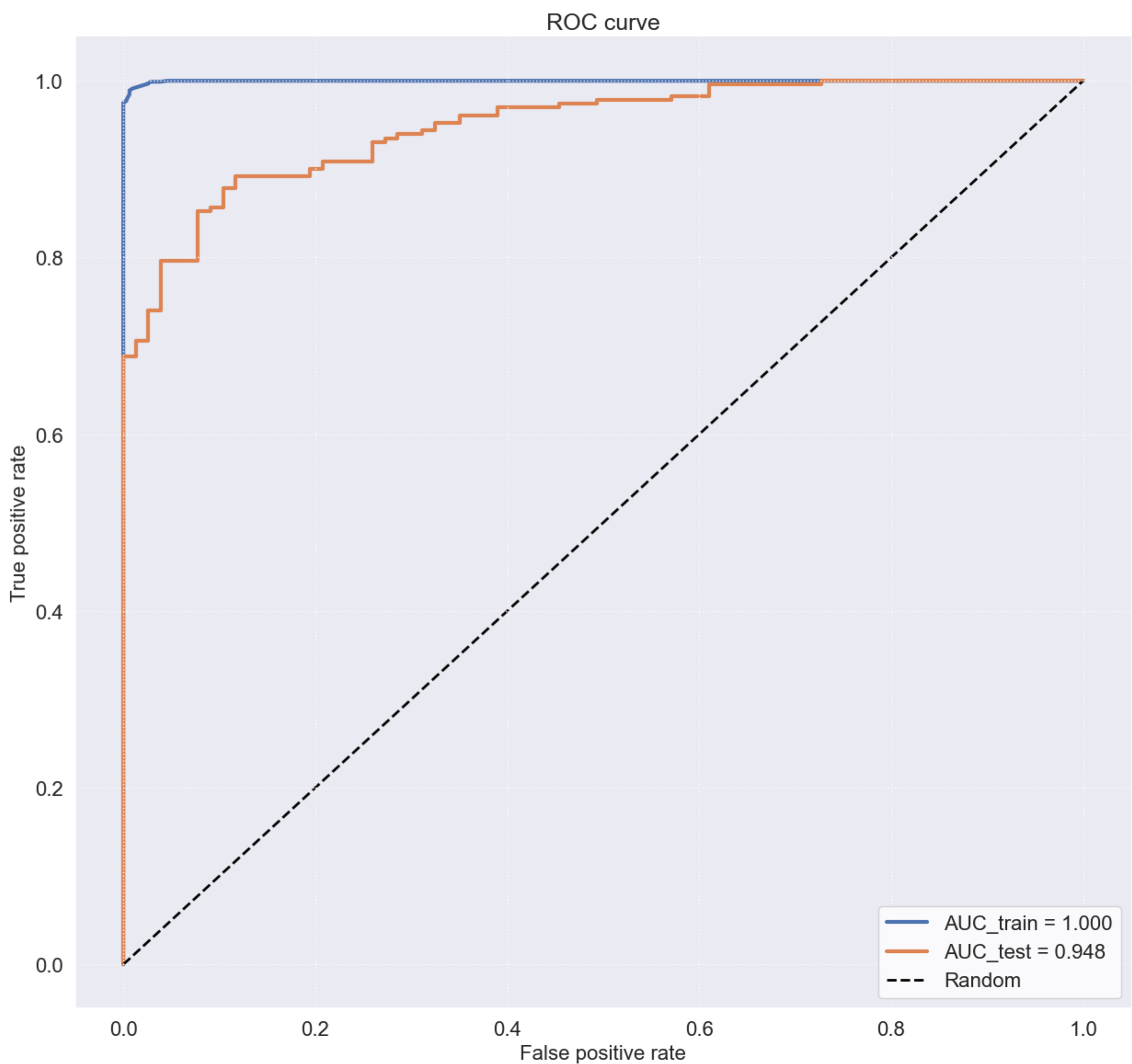
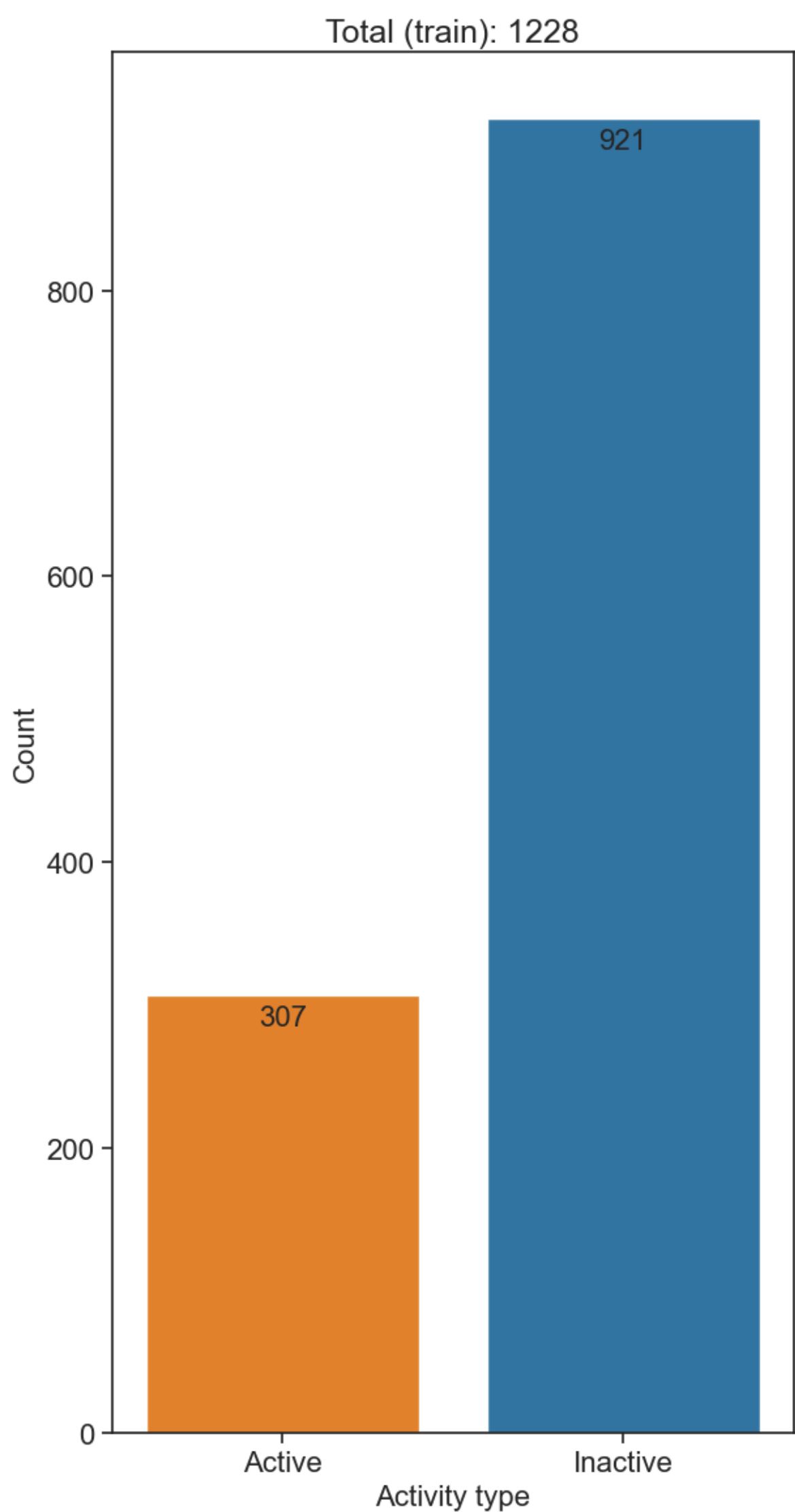
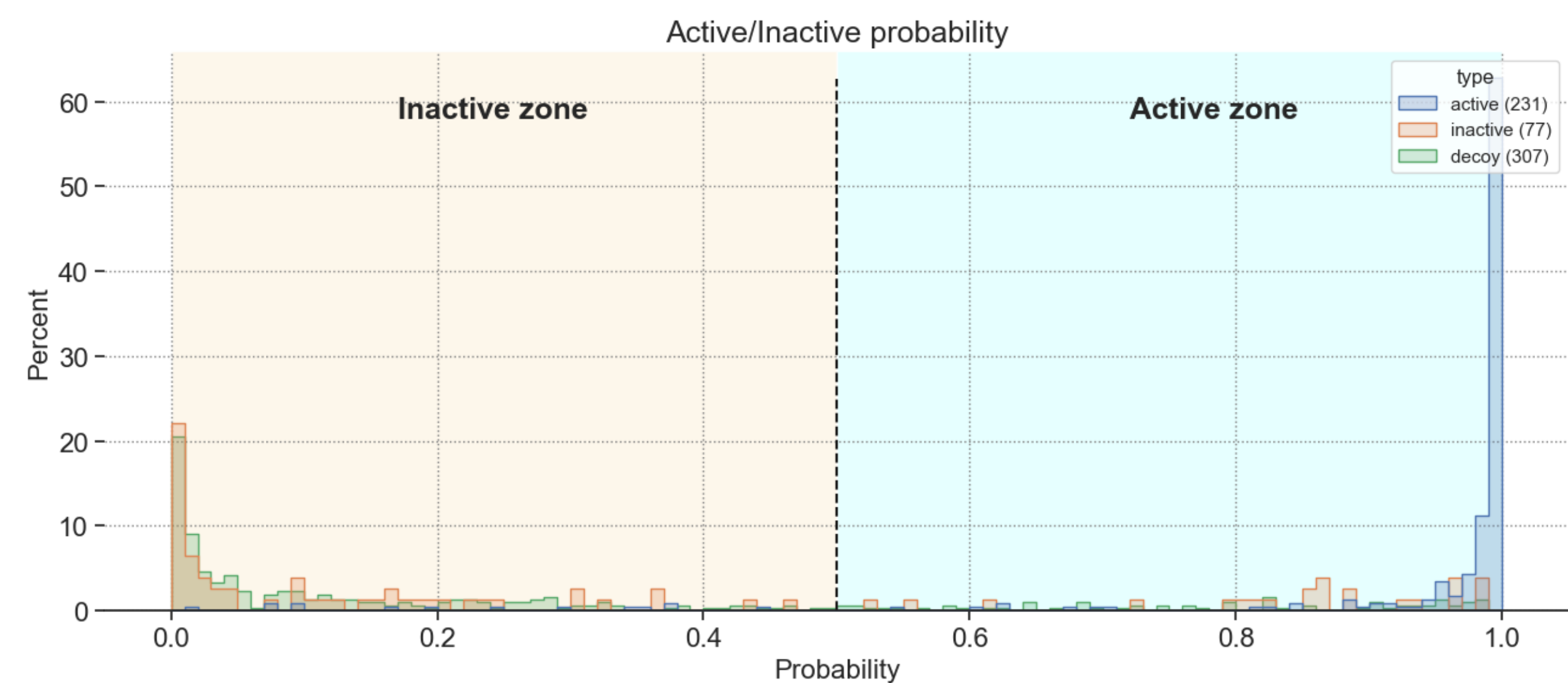
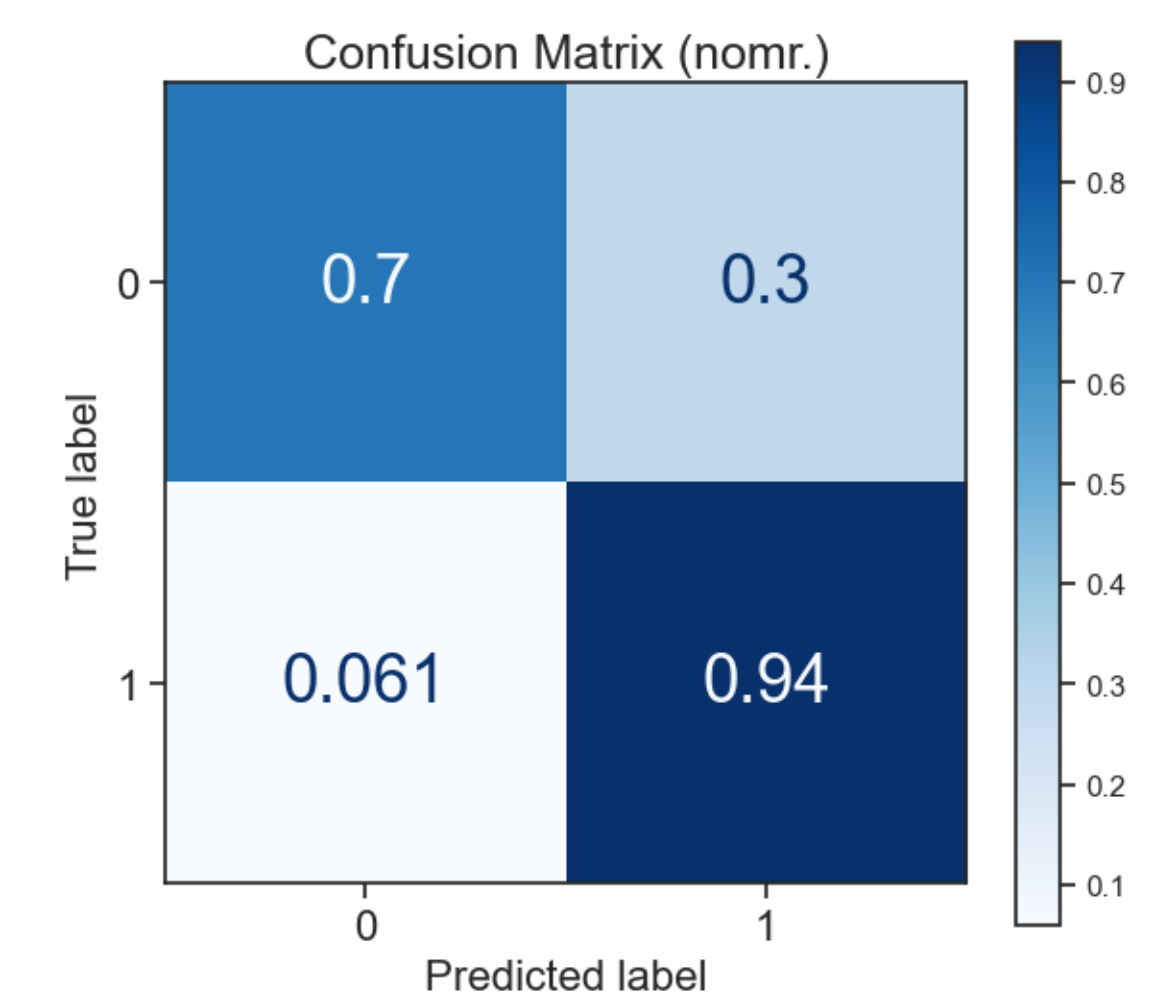
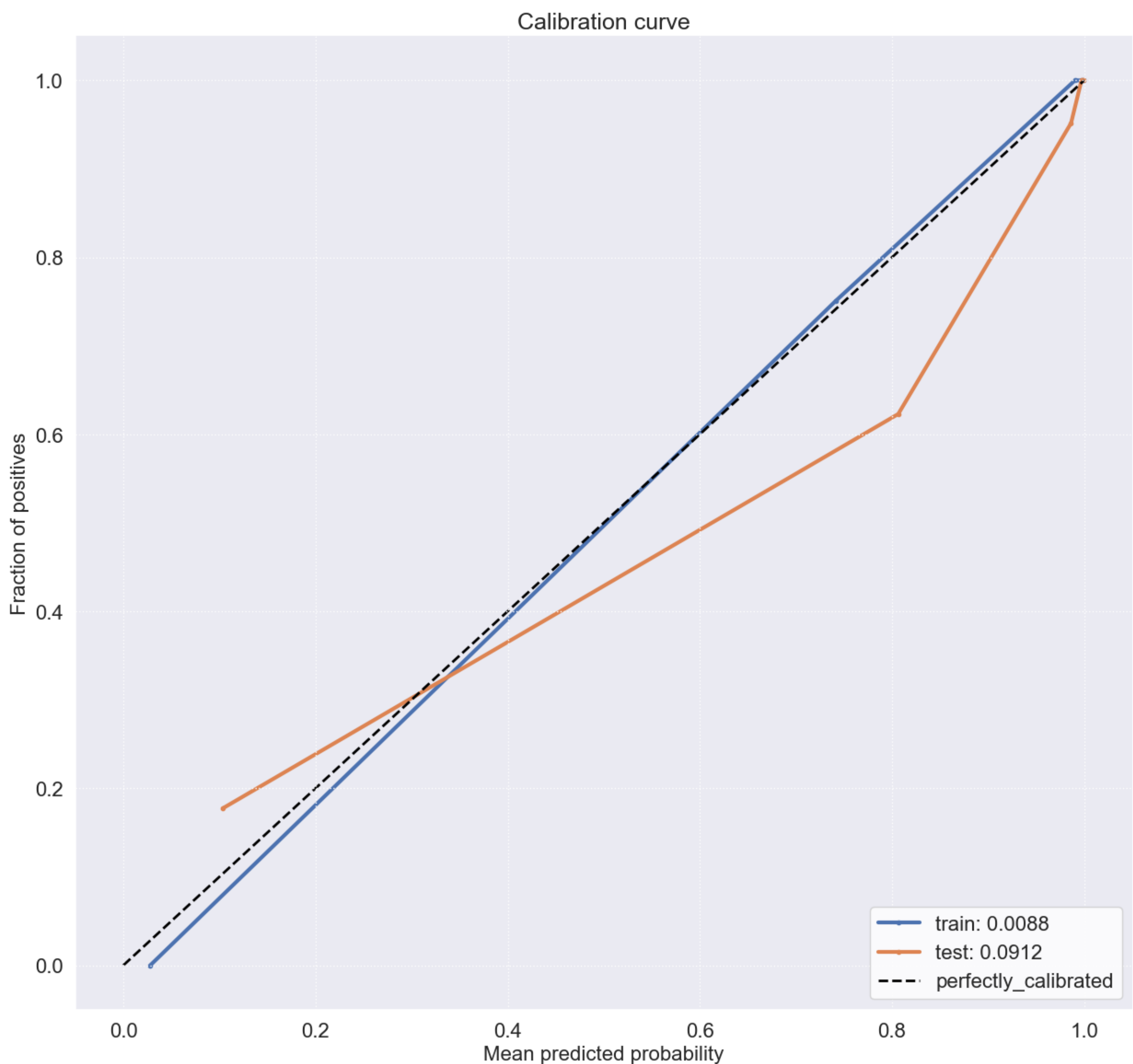
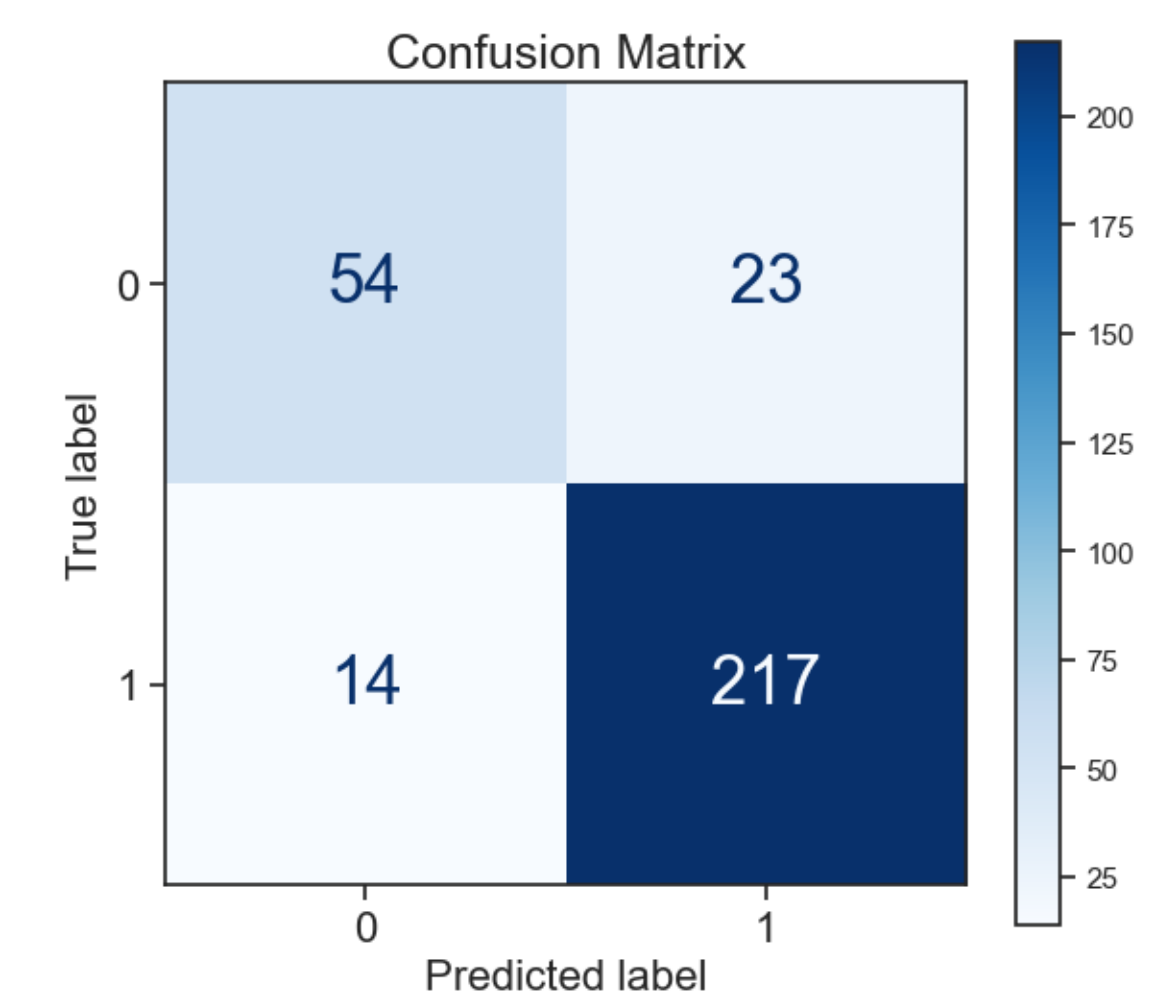


Protein: P49810 - metric: balanced_accuracy

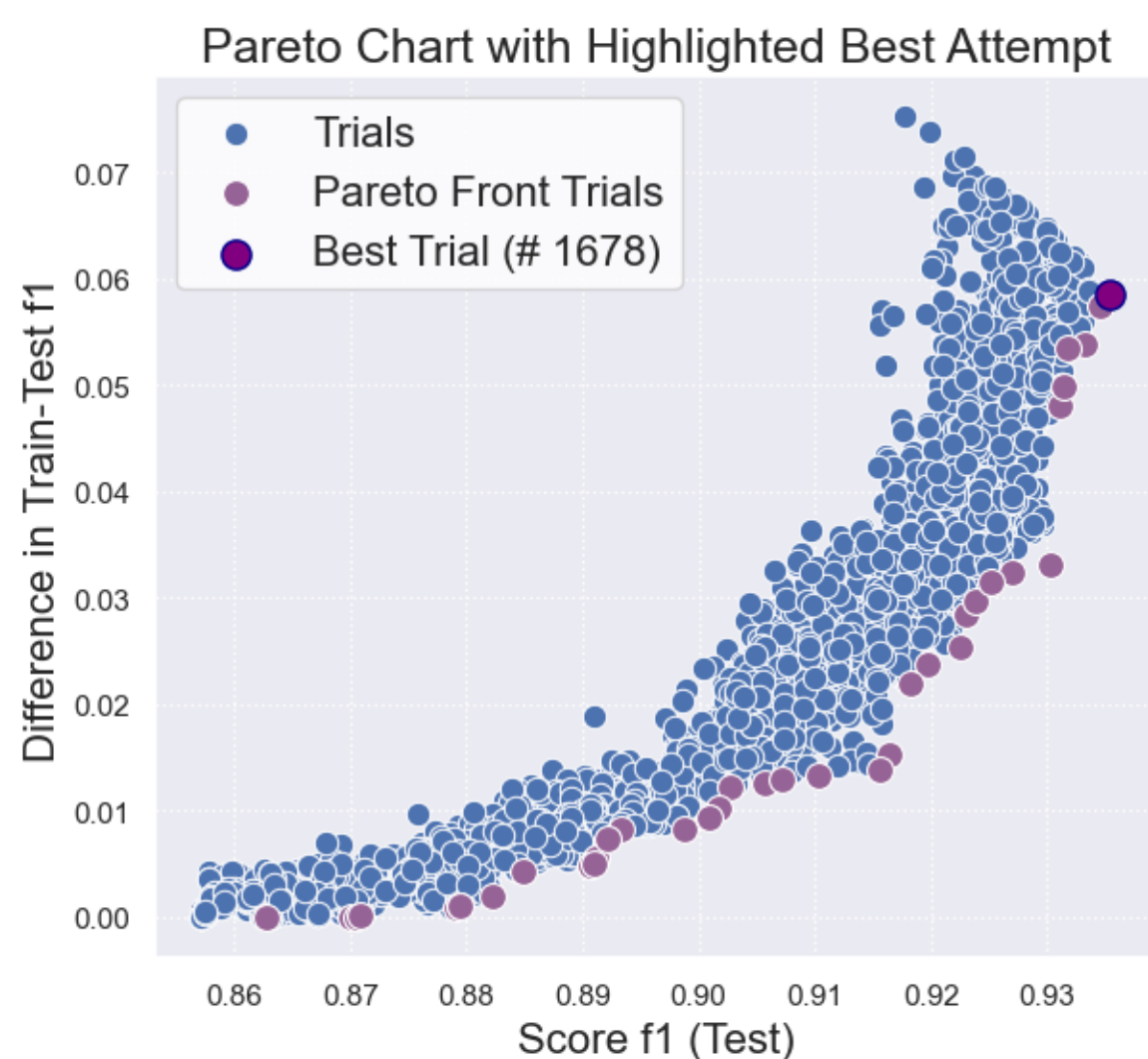
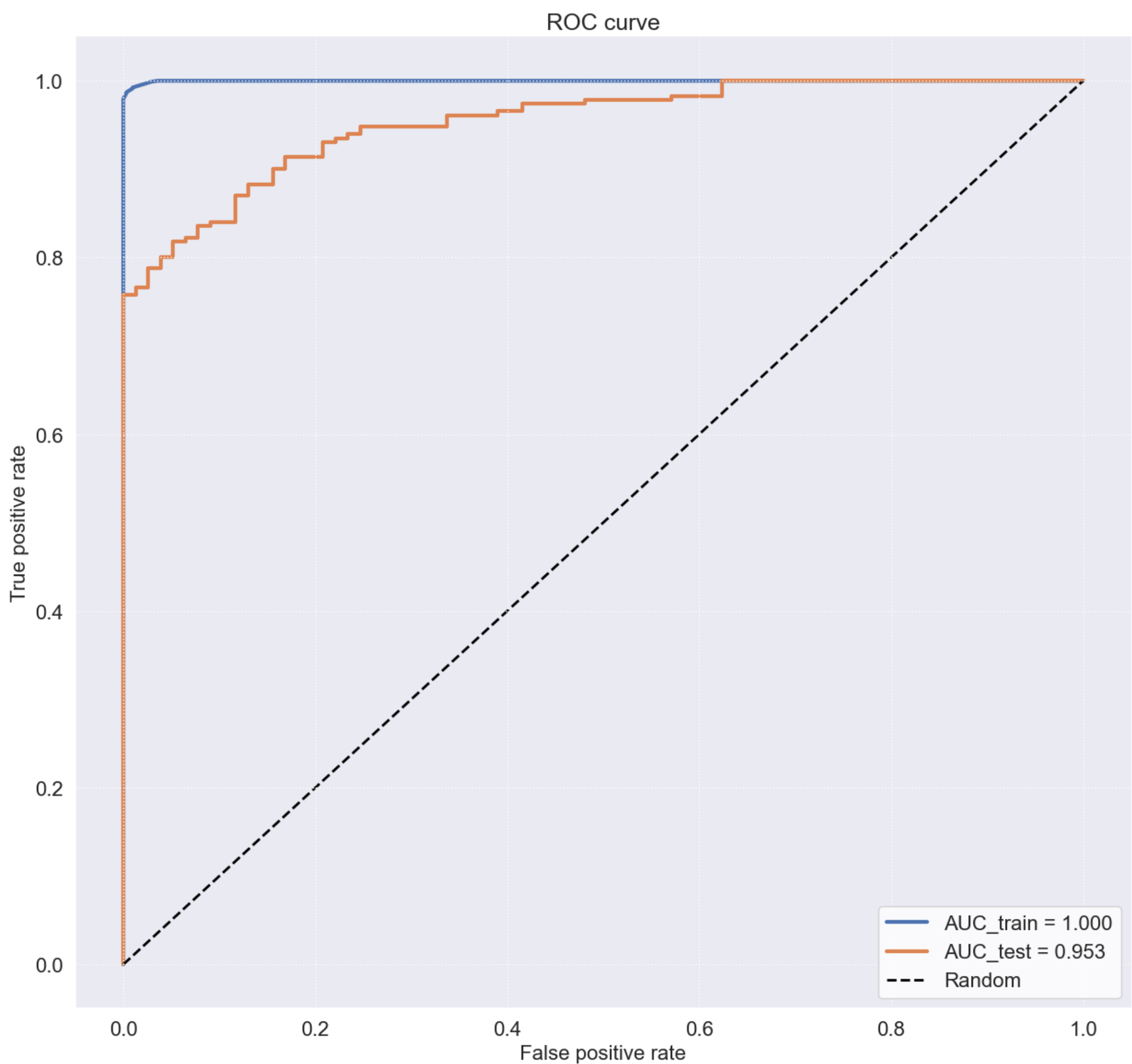
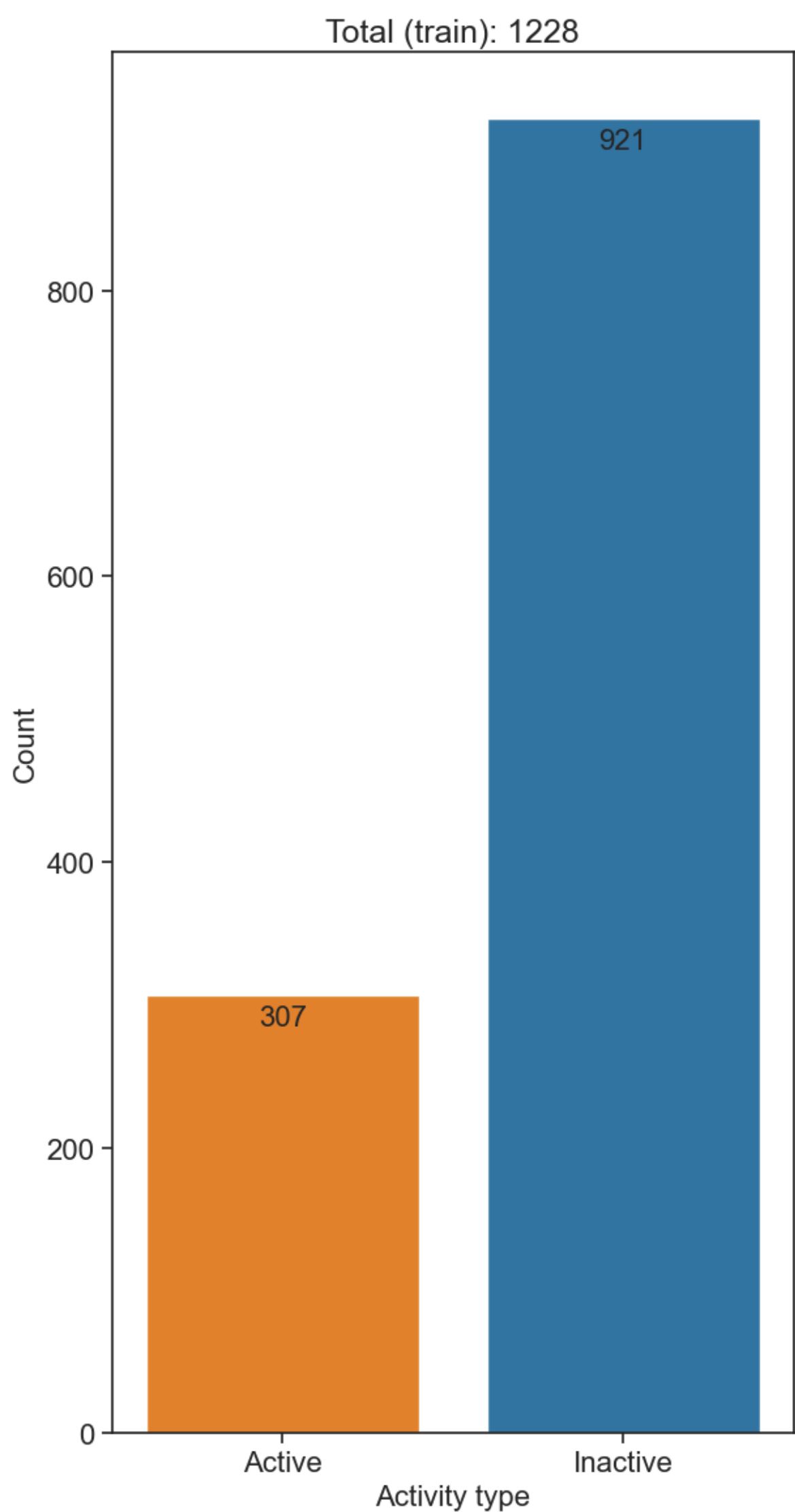


XGBoost Parameters	Value
alpha	0.6704
colsample_bytree	0.9962
gamma	0.0751
lambda	2.8912
learning_rate	0.0406
max_depth	10.0
min_child_weight	1.0
n_estimators	969.0
reg_alpha	0.3215
reg_lambda	0.4357
scale_pos_weight	1.0522
subsample	0.5344

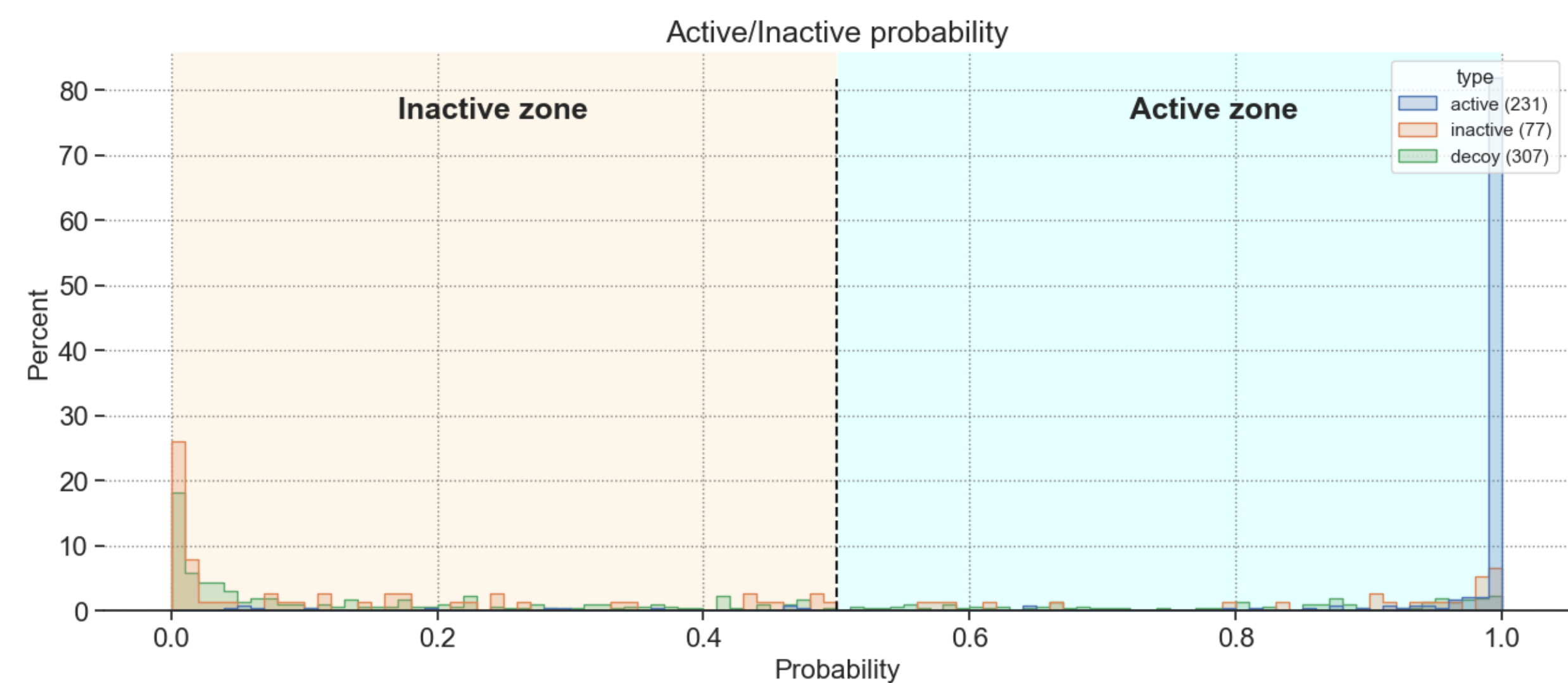
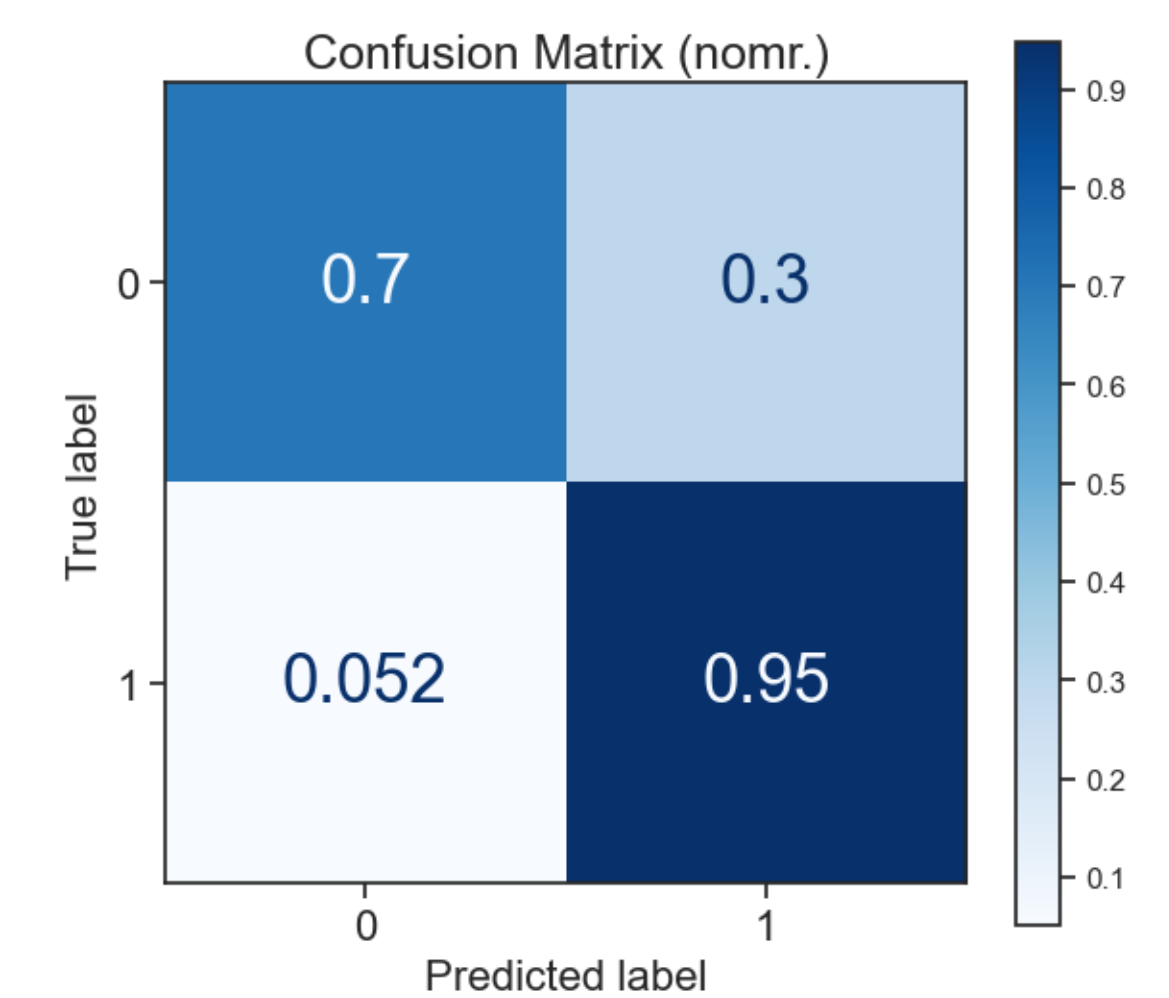
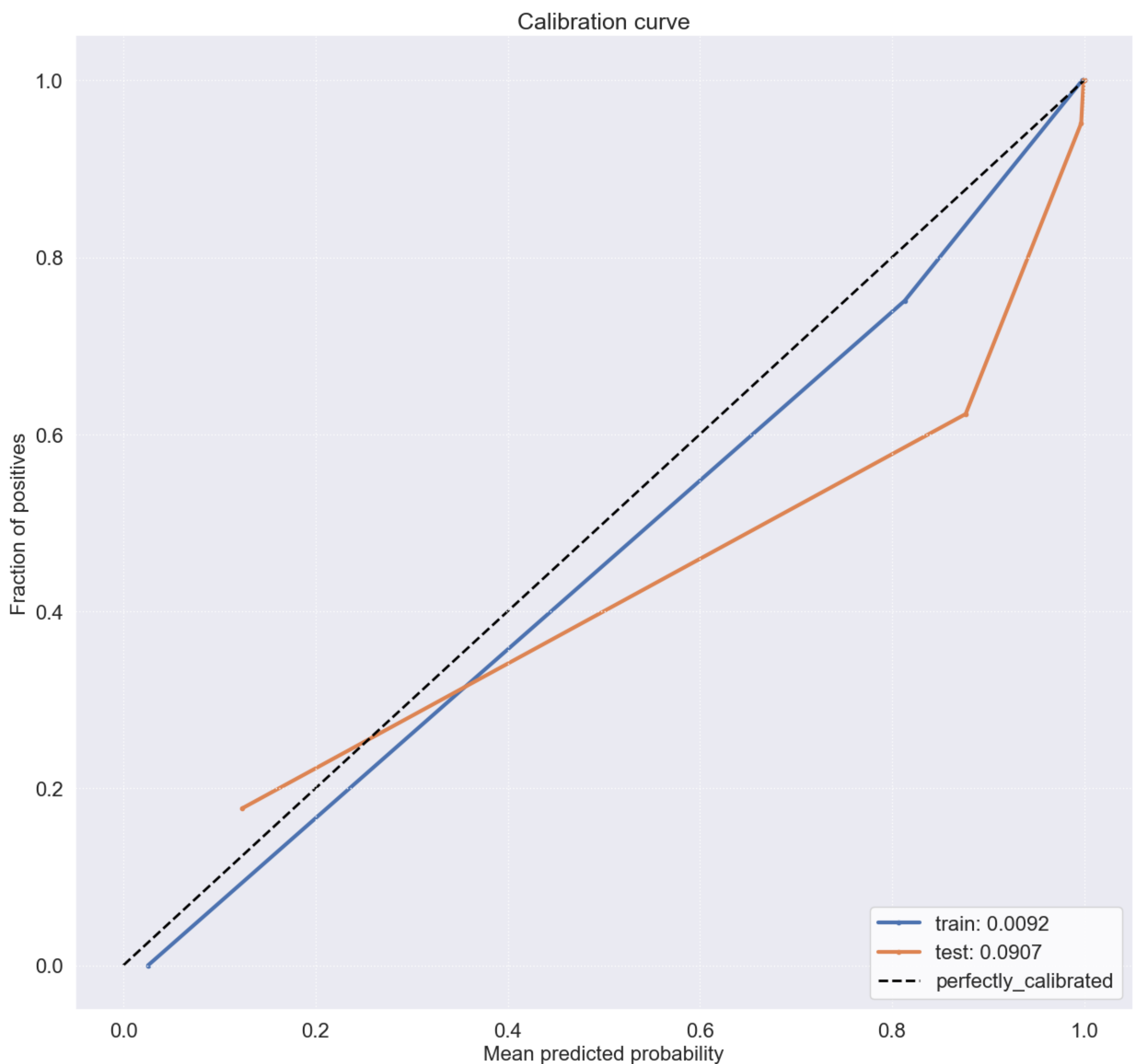
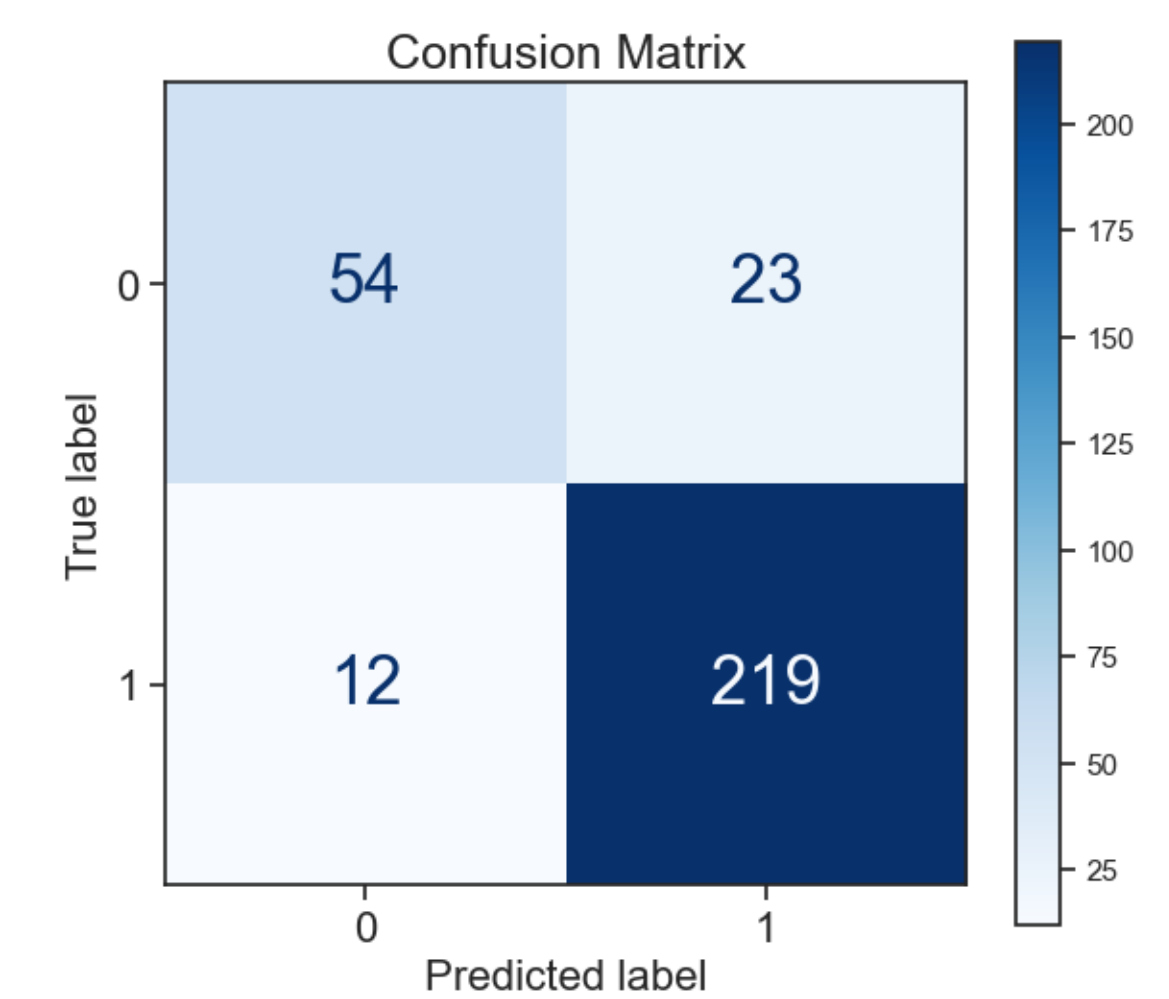


Metric	Train	Test
AUC	0.9997	0.9484
accuracy	0.9919	0.8799
balanced accuracy	0.9859	0.8203
recall_(sens)	0.9978	0.9394
specificity	0.9739	0.7013
precision	0.9914	0.9042
f1_score	0.9918	0.8773

Protein: P49810 - metric: f1

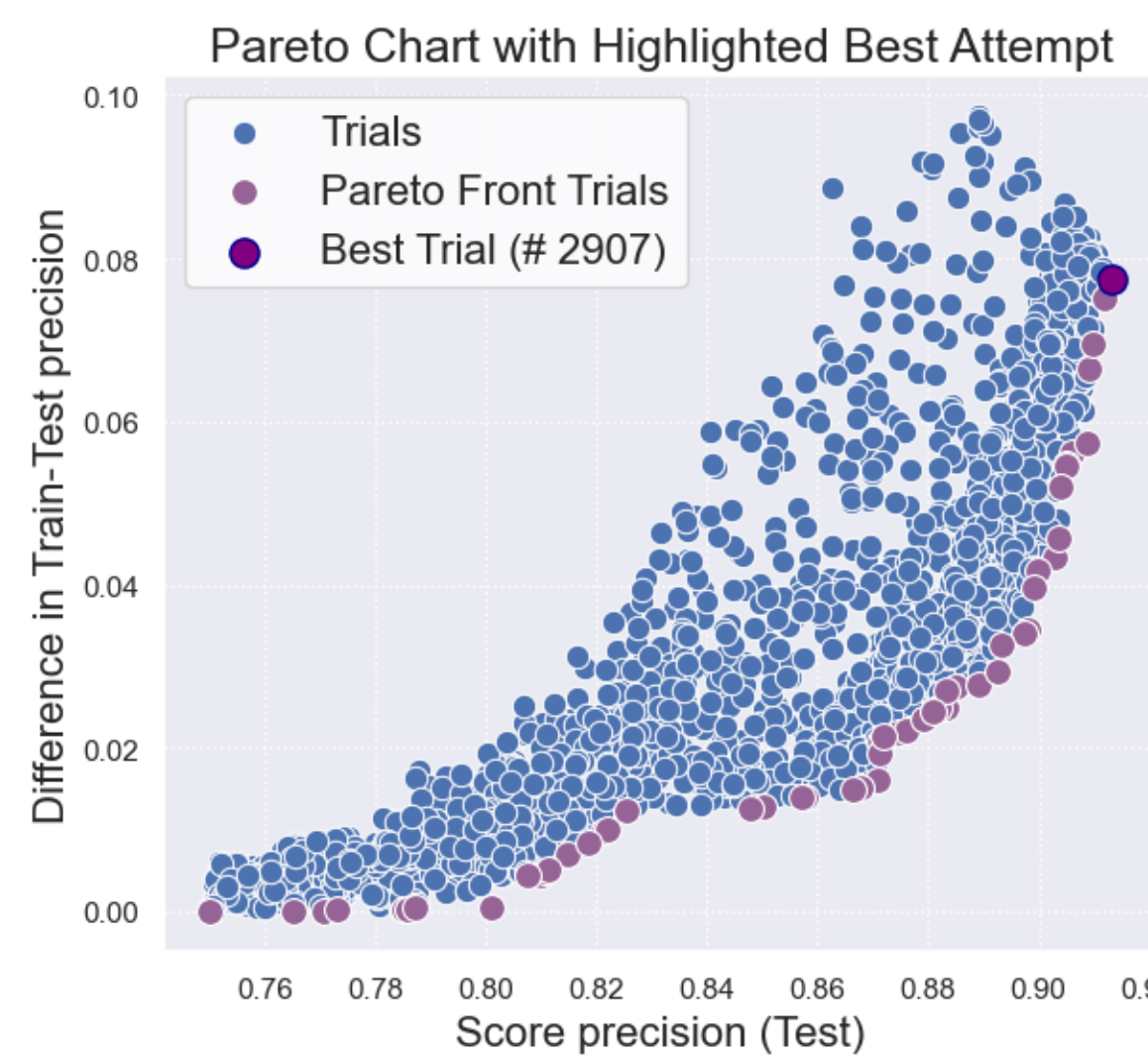
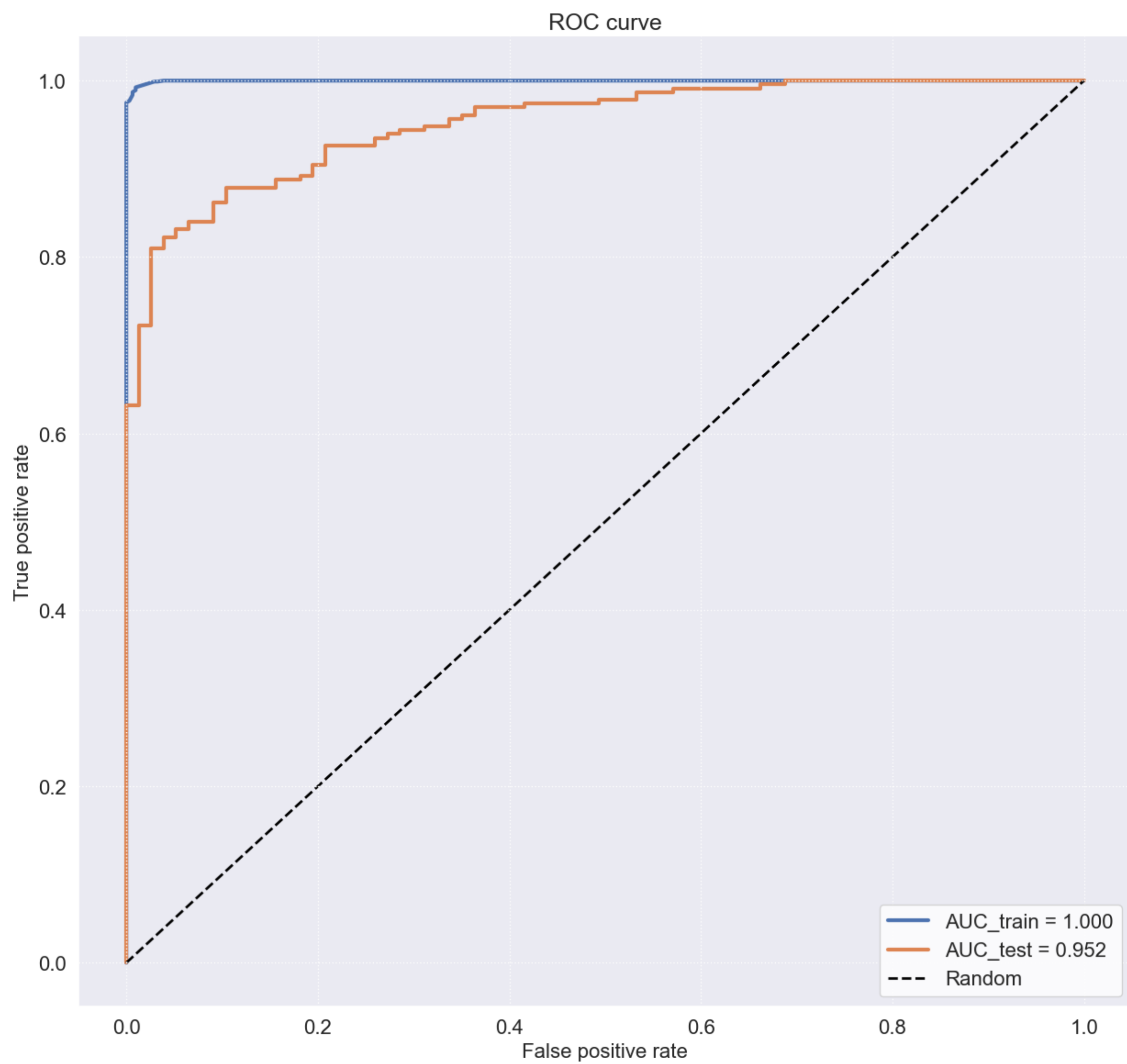
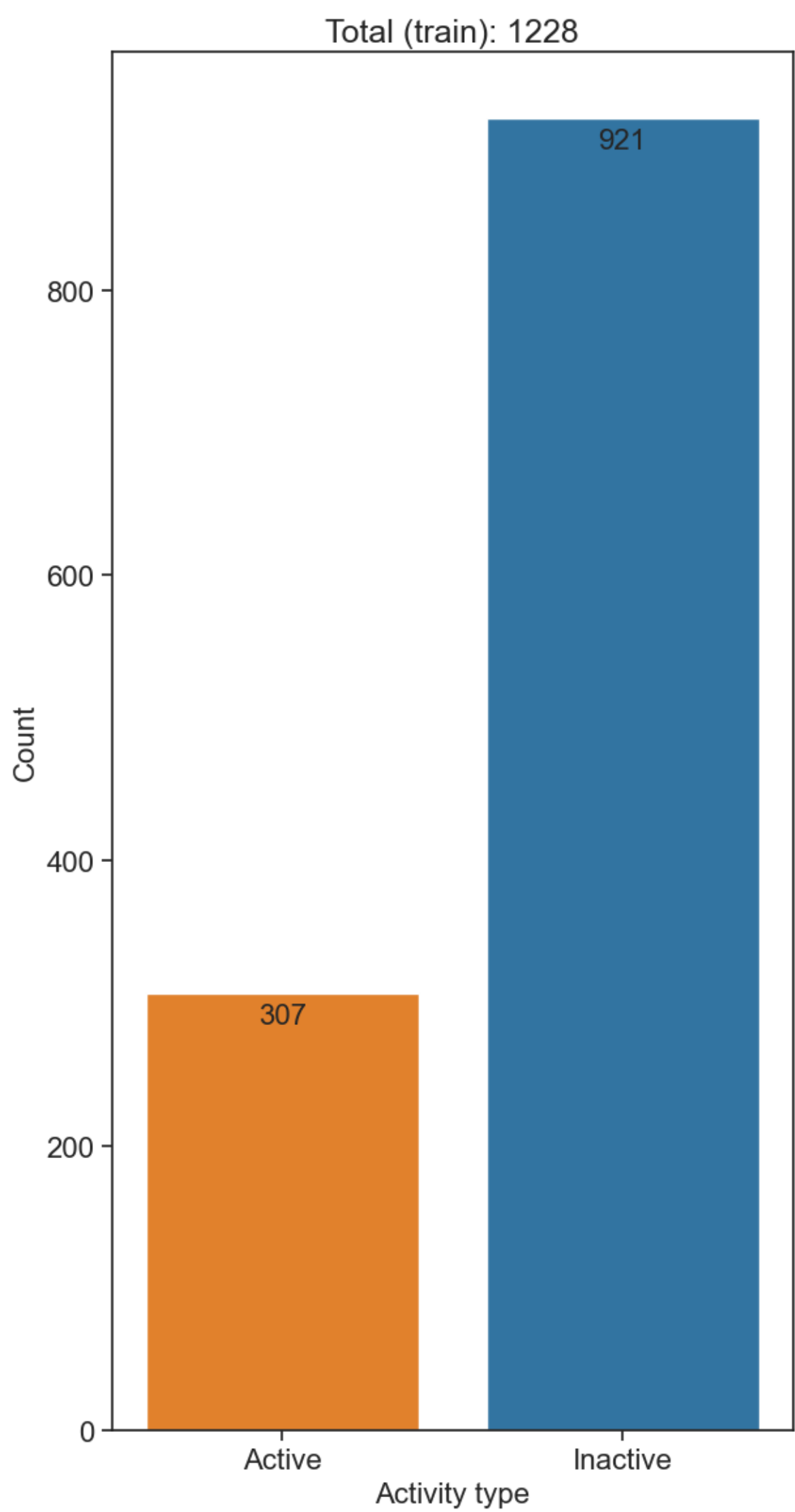


XGBoost Parameters	Value
alpha	0.0915
colsample_bytree	0.8102
gamma	0.1289
lambda	0.6002
learning_rate	0.1249
max_depth	9.0
min_child_weight	2.0
n_estimators	624.0
reg_alpha	0.0164
reg_lambda	0.7705
scale_pos_weight	4.9177
subsample	0.9343

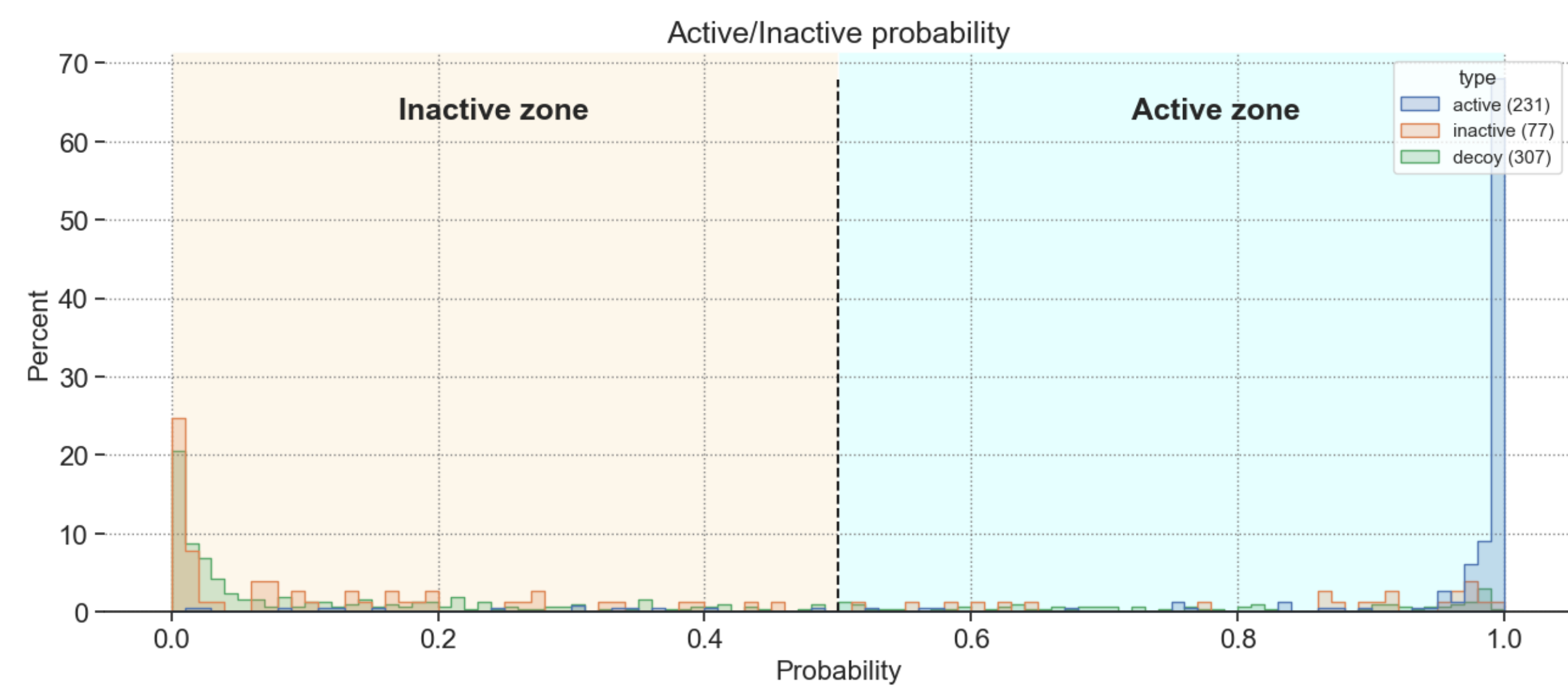
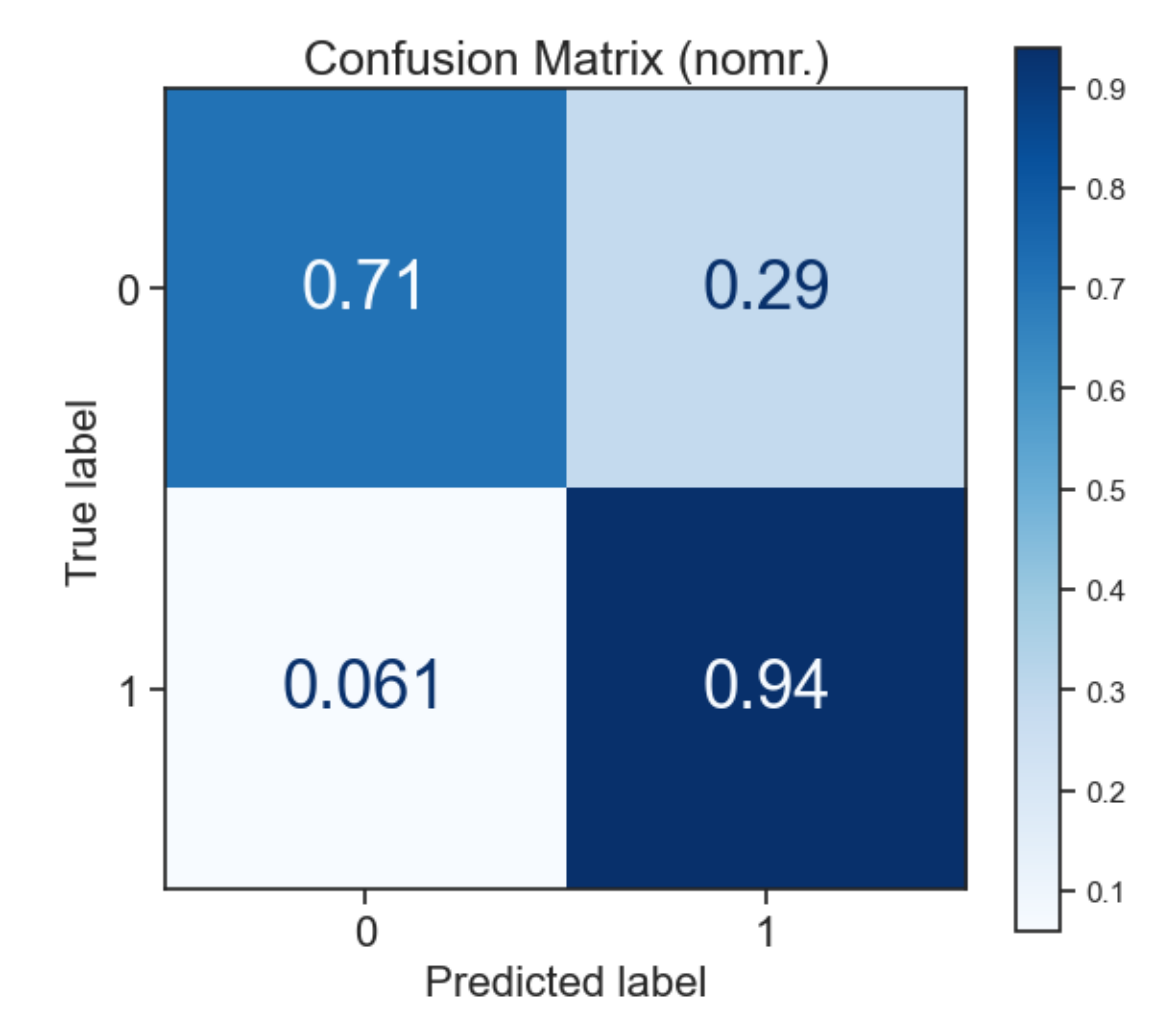
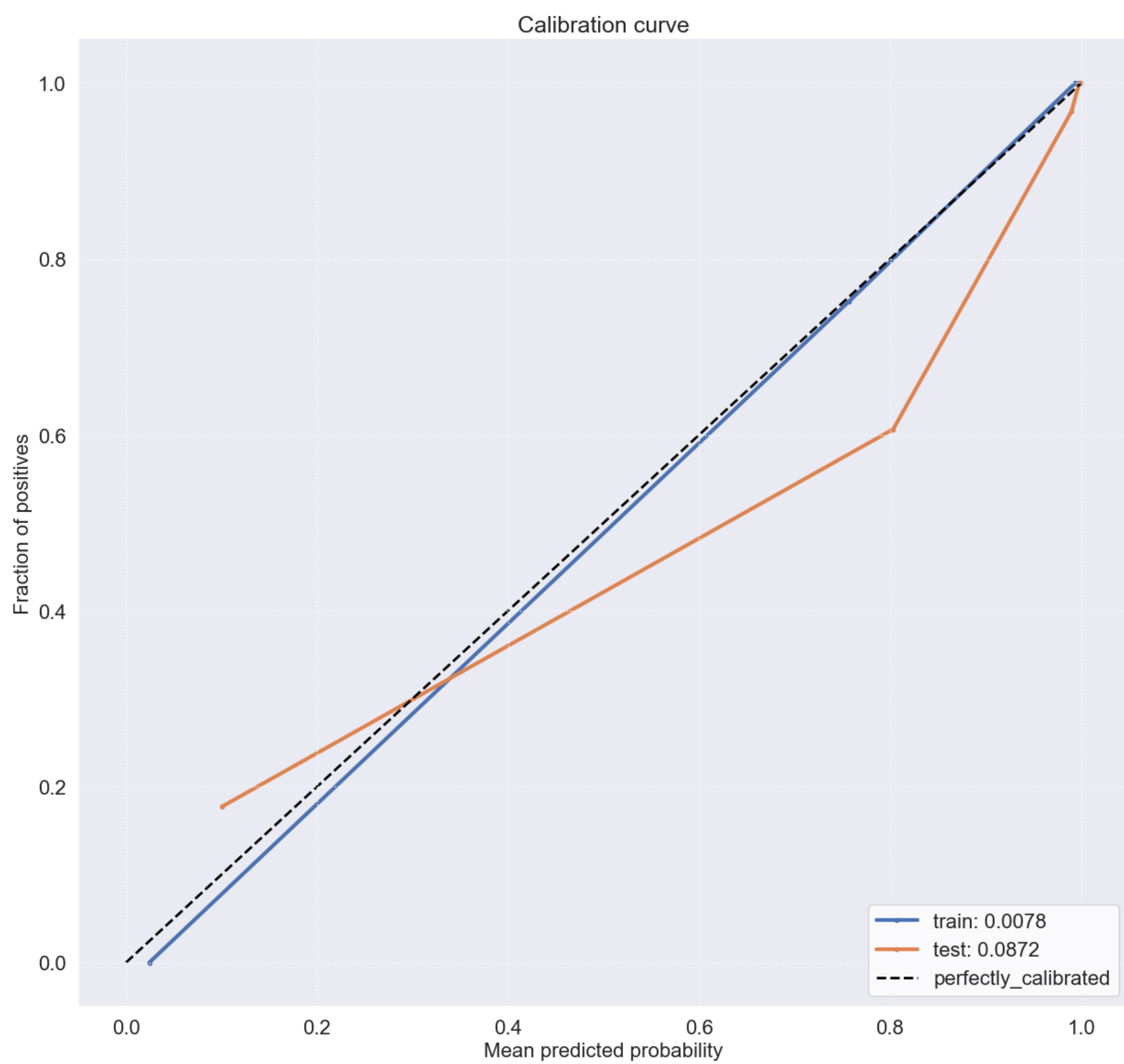
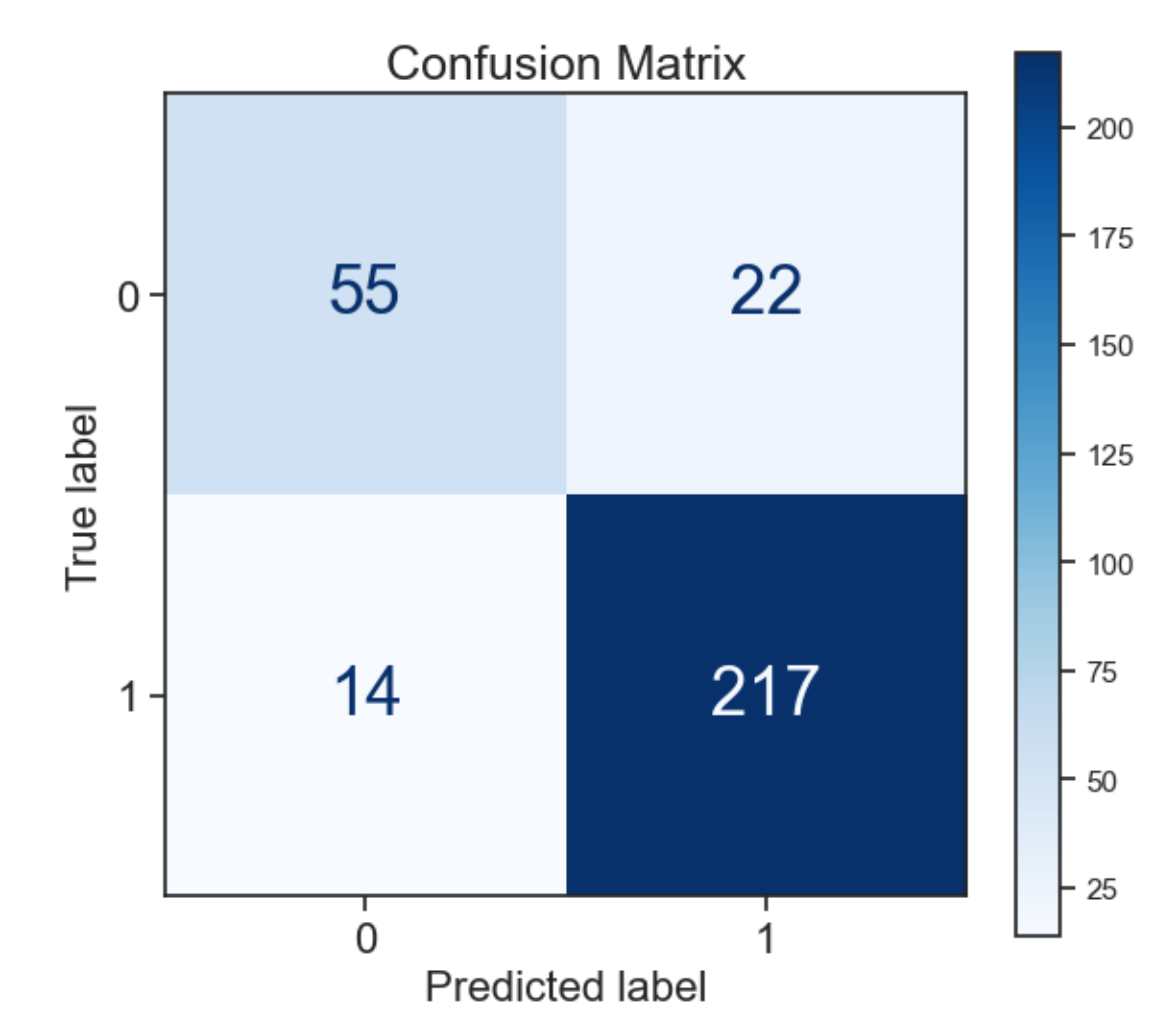


Metric	Train	Test
AUC	0.9998	0.9534
accuracy	0.991	0.8864
balanced accuracy	0.9821	0.8247
recall_(sens)	1.0	0.9481
specificity	0.9642	0.7013
precision	0.9882	0.905
f1_score	0.991	0.8833

Protein: P49810 - metric: precision

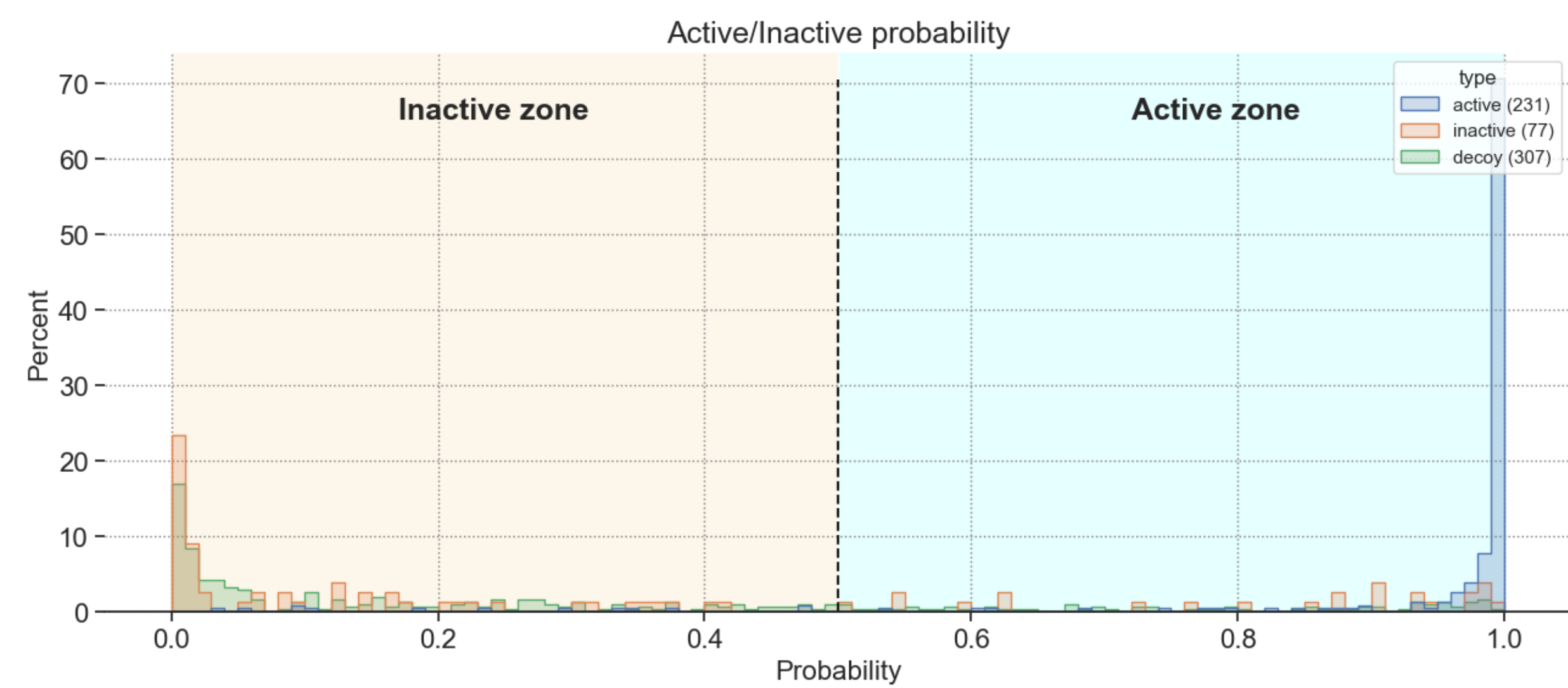
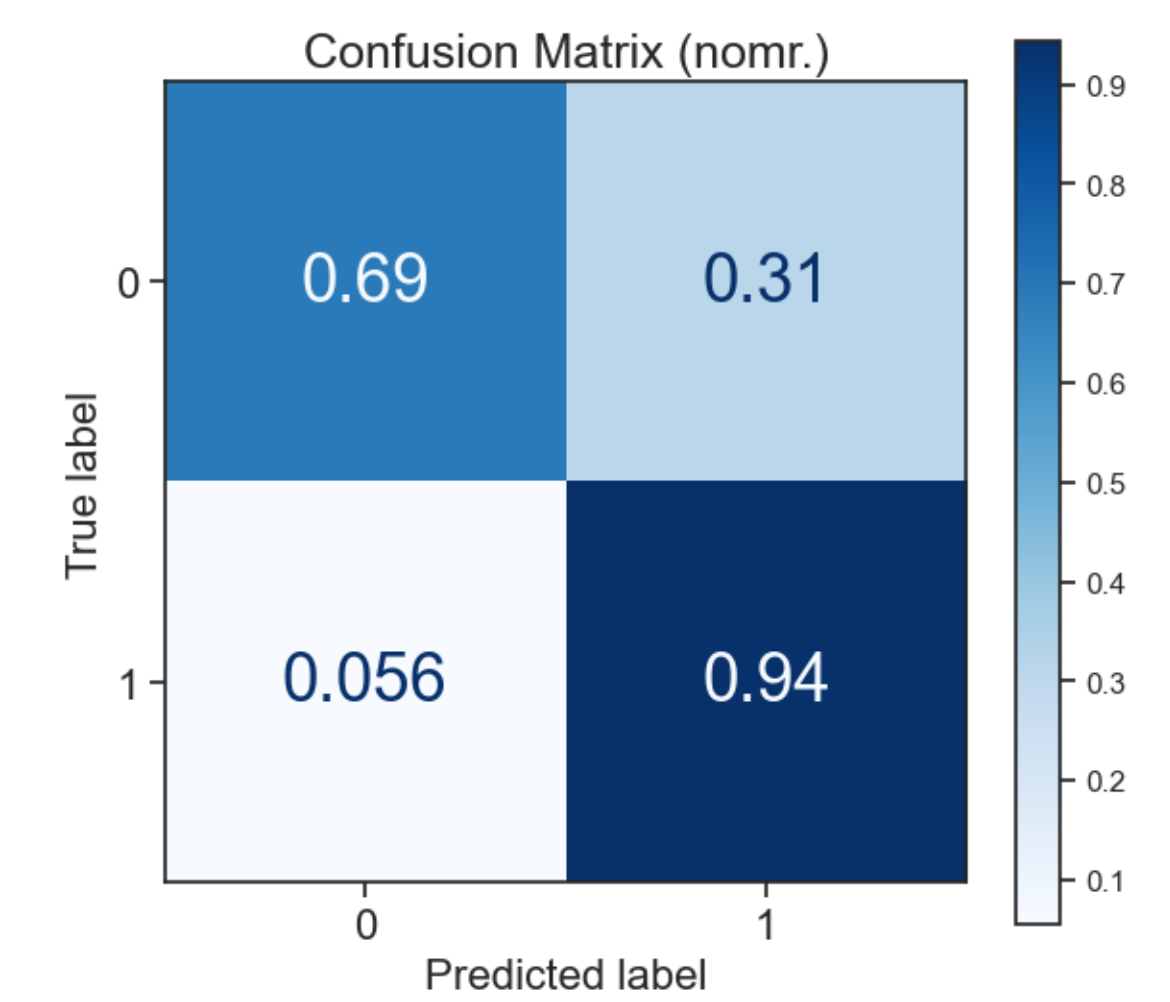
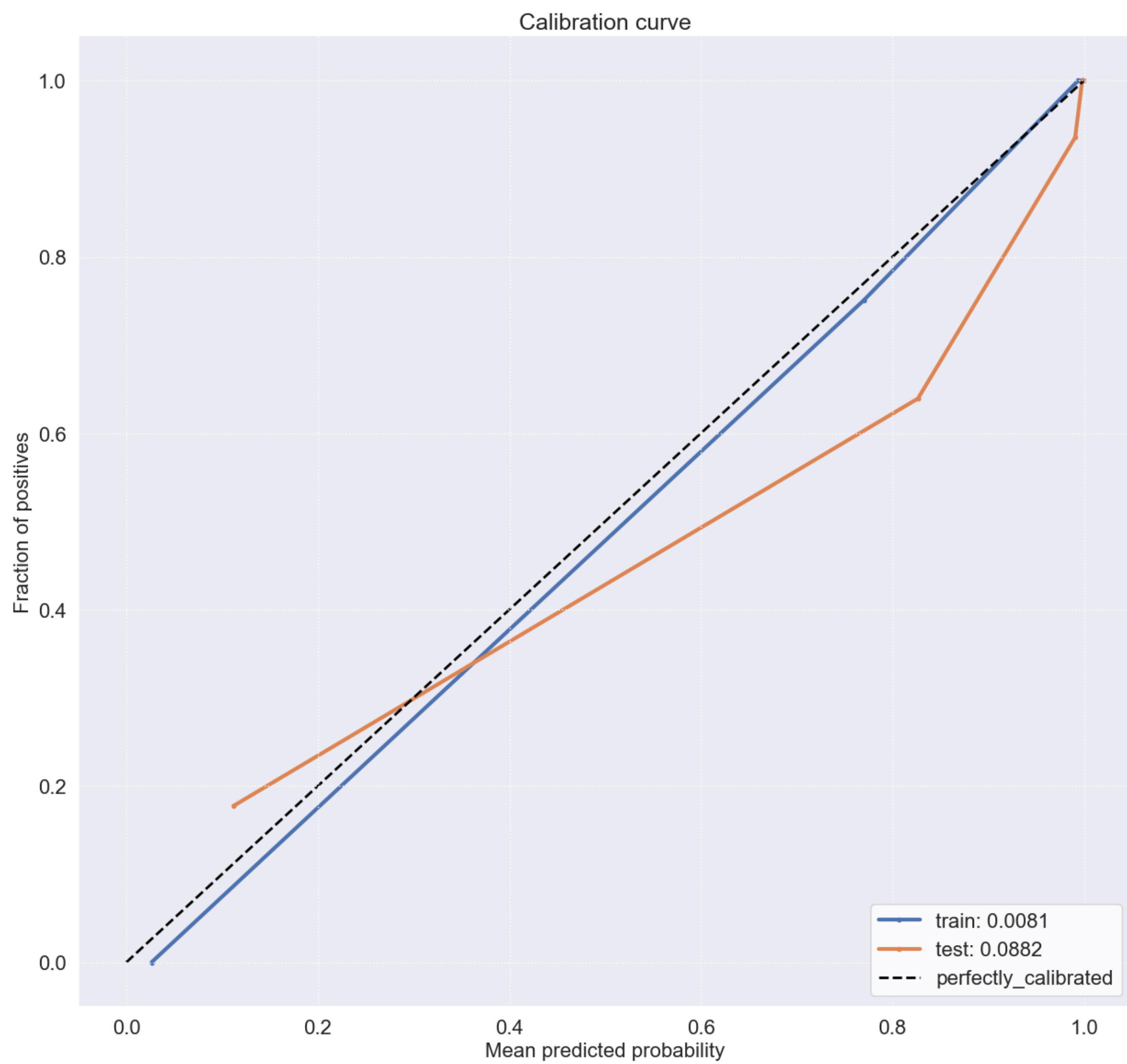
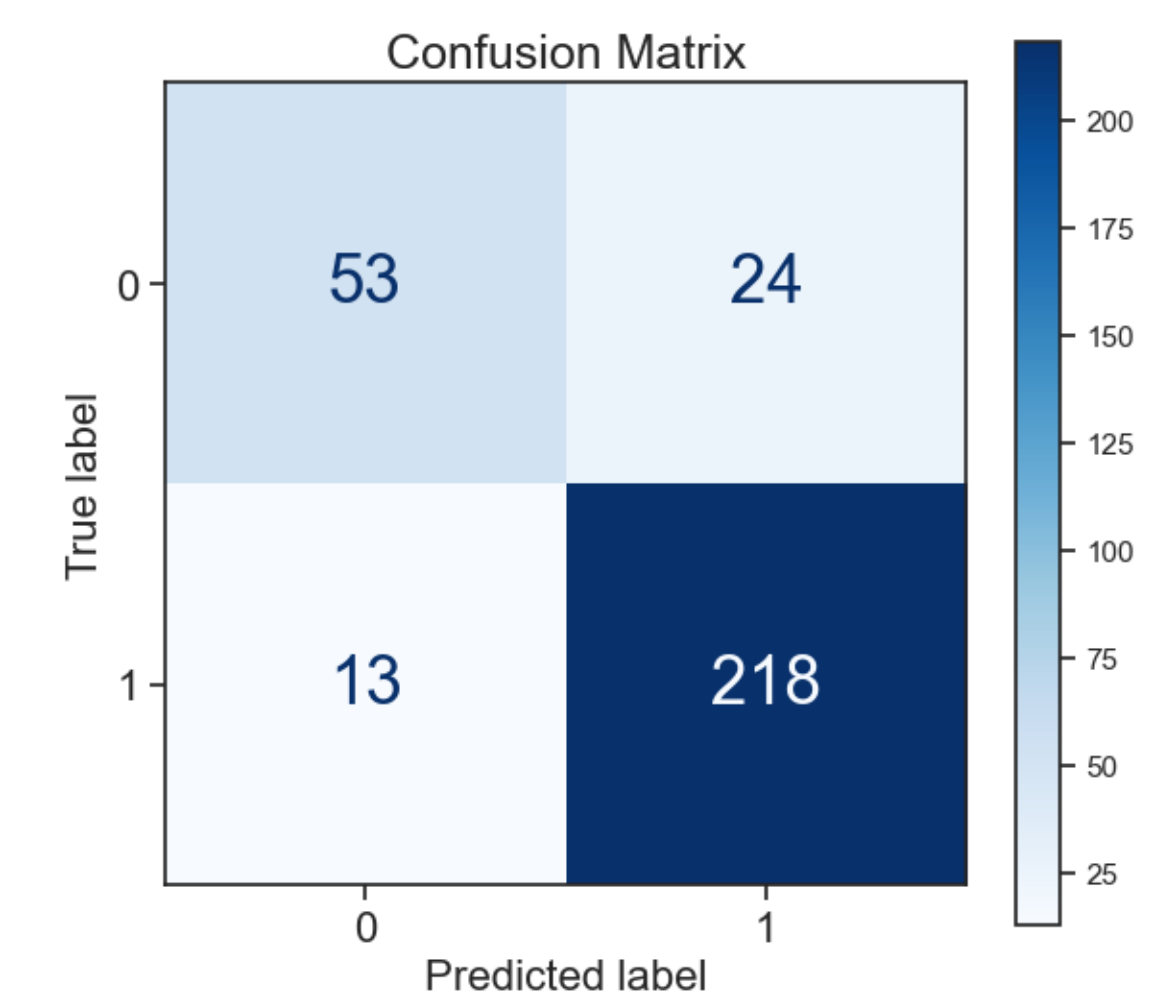
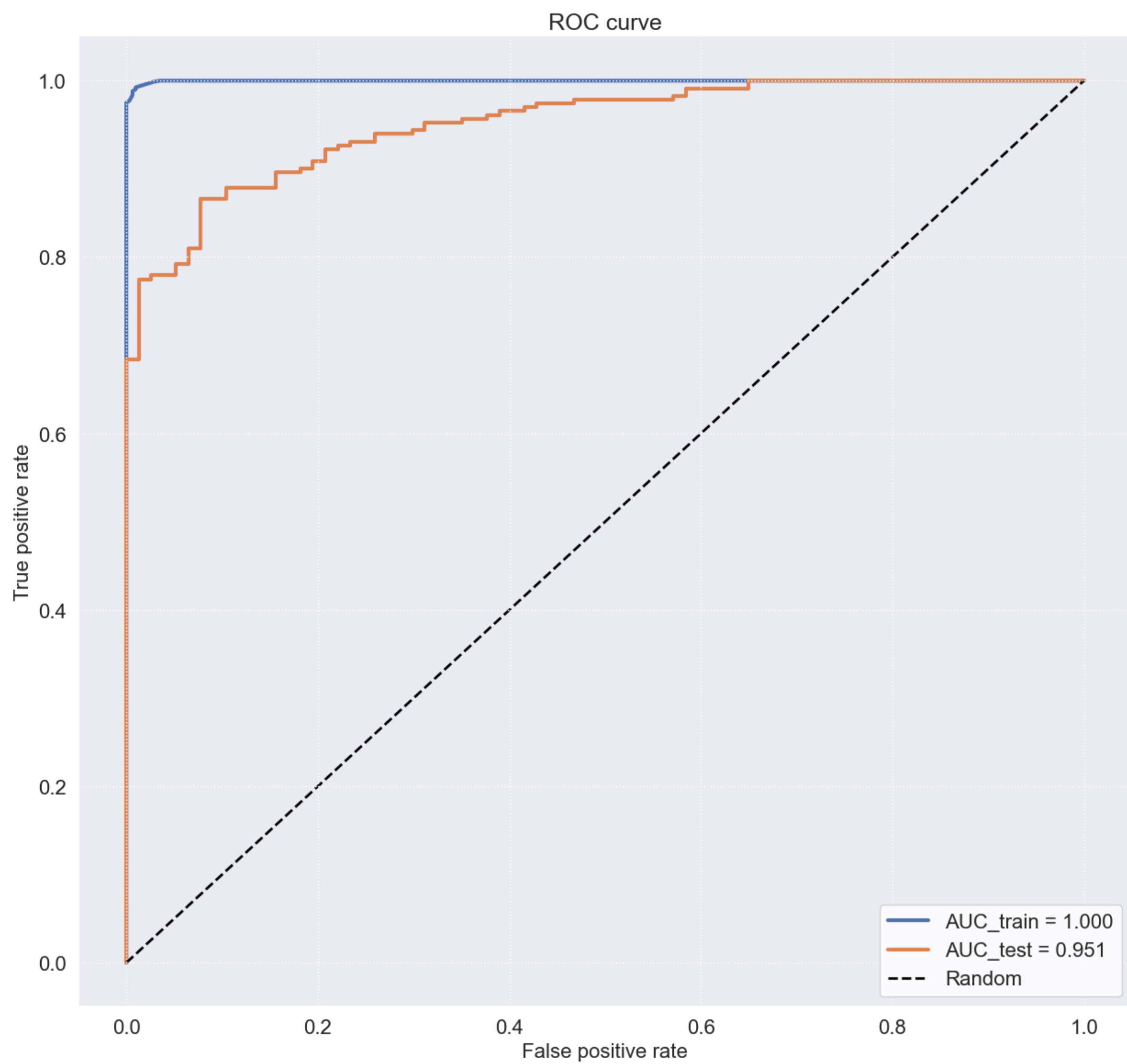
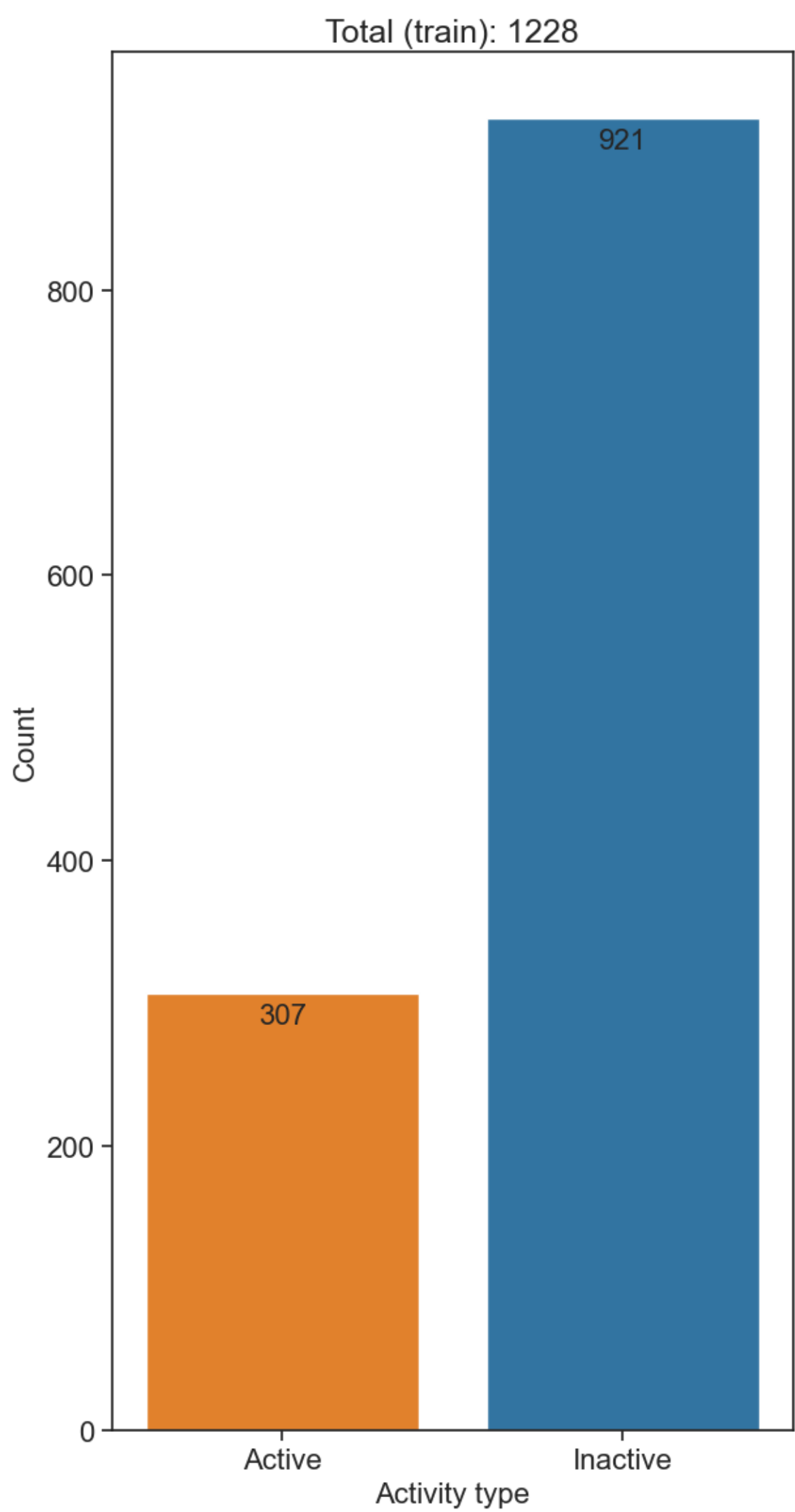


XGBoost Parameters	Value
alpha	3.0947
colsample_bytree	0.8258
gamma	0.2176
lambda	1.2772
learning_rate	0.1161
max_depth	9.0
min_child_weight	1.0
n_estimators	976.0
reg_alpha	0.3139
reg_lambda	0.5603
scale_pos_weight	1.3206
subsample	0.7715



Metric	Train	Test
AUC	0.9997	0.9517
accuracy	0.9919	0.8831
balanced accuracy	0.9848	0.8268
recall_(sens)	0.9989	0.9394
specificity	0.9707	0.7143
precision	0.9903	0.9079
f1_score	0.9918	0.8809

Protein: P49810 - metric: SoftVotingXGBoostEnsemble



Metric	Train	Test
AUC	0.9997	0.9514
accuracy	0.9919	0.8799
balanced accuracy	0.9848	0.816
recall_(sens)	0.9989	0.9437
specificity	0.9707	0.6883
precision	0.9903	0.9008
f1_score	0.9918	0.8766