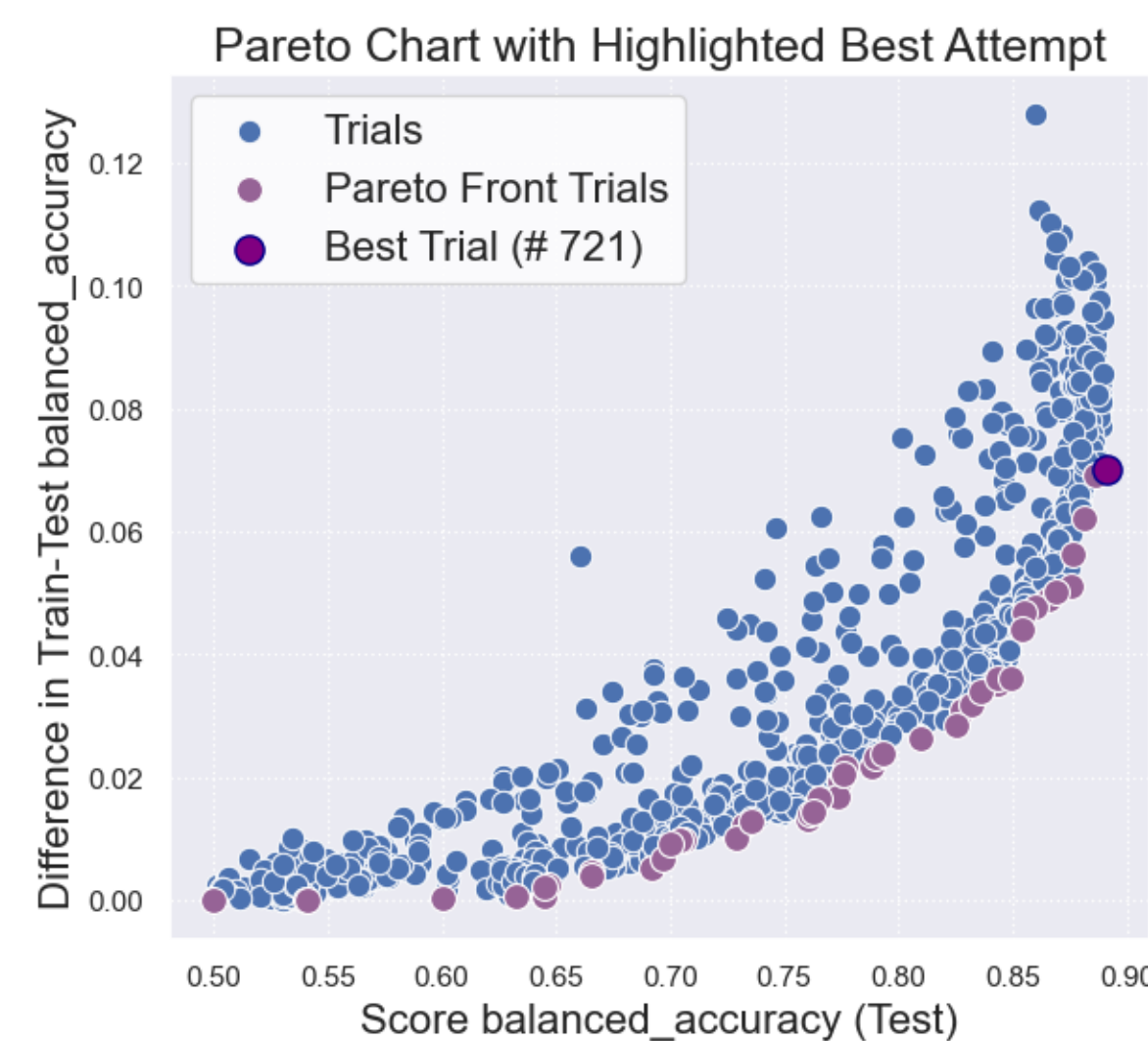
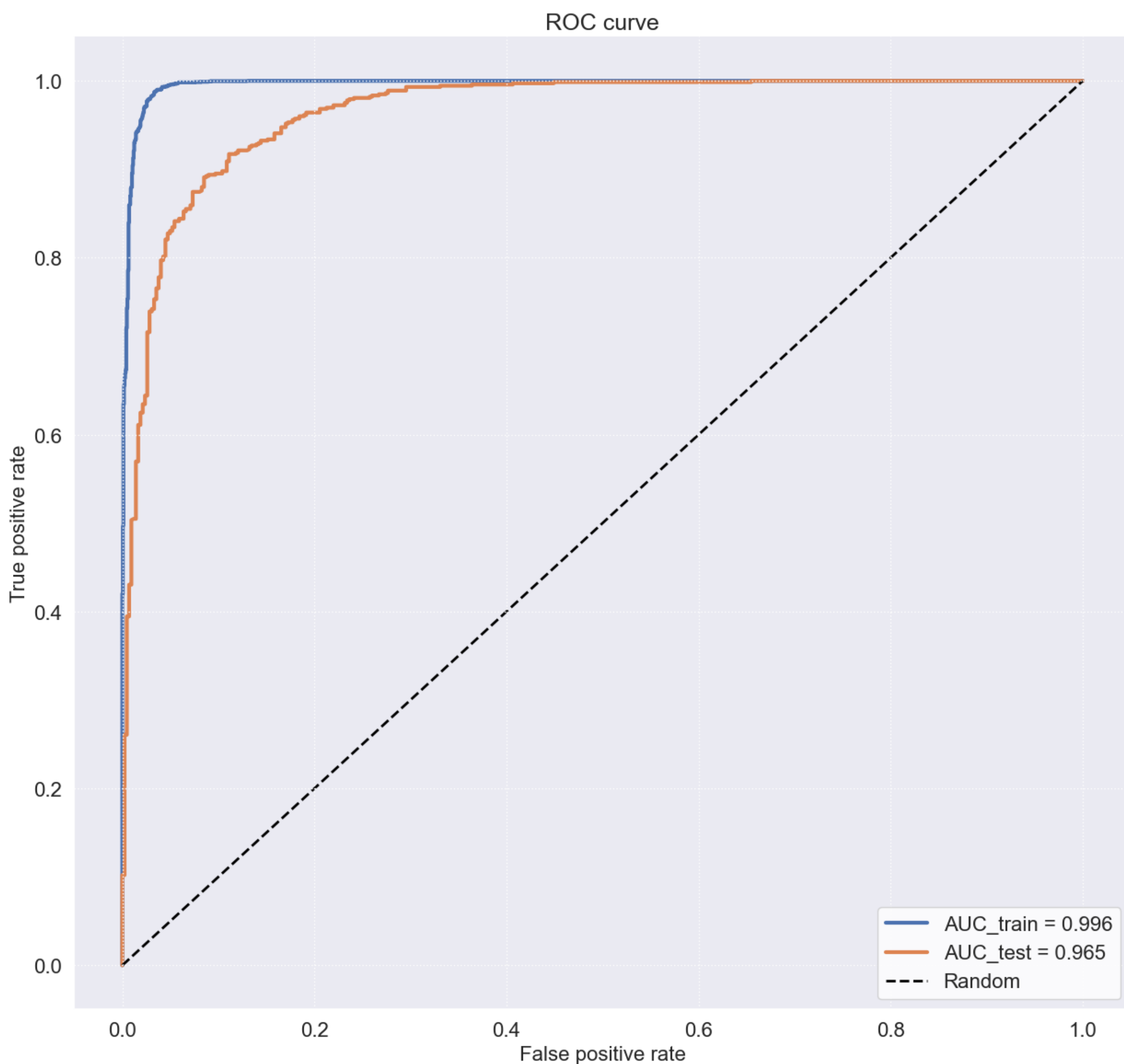
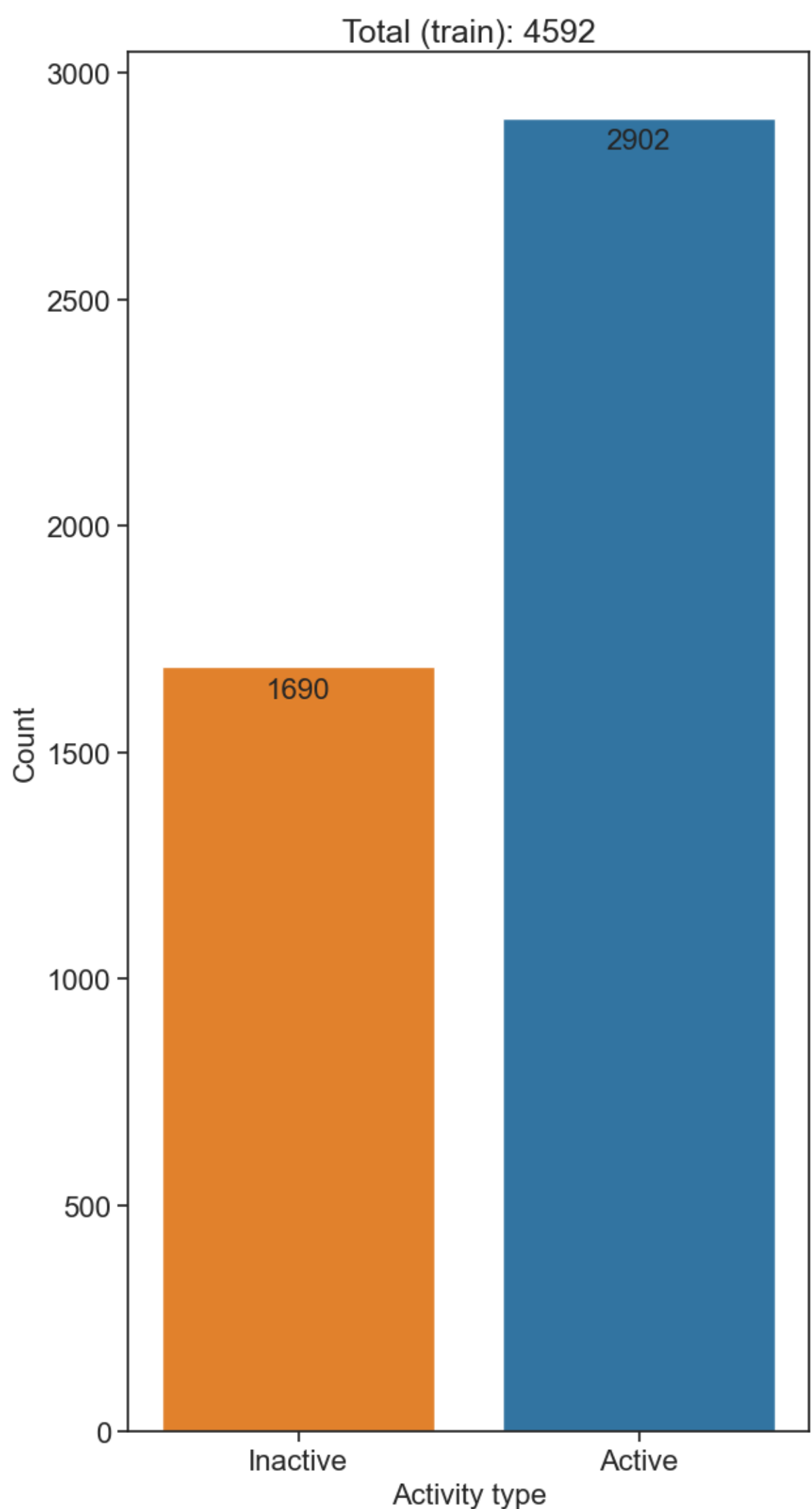
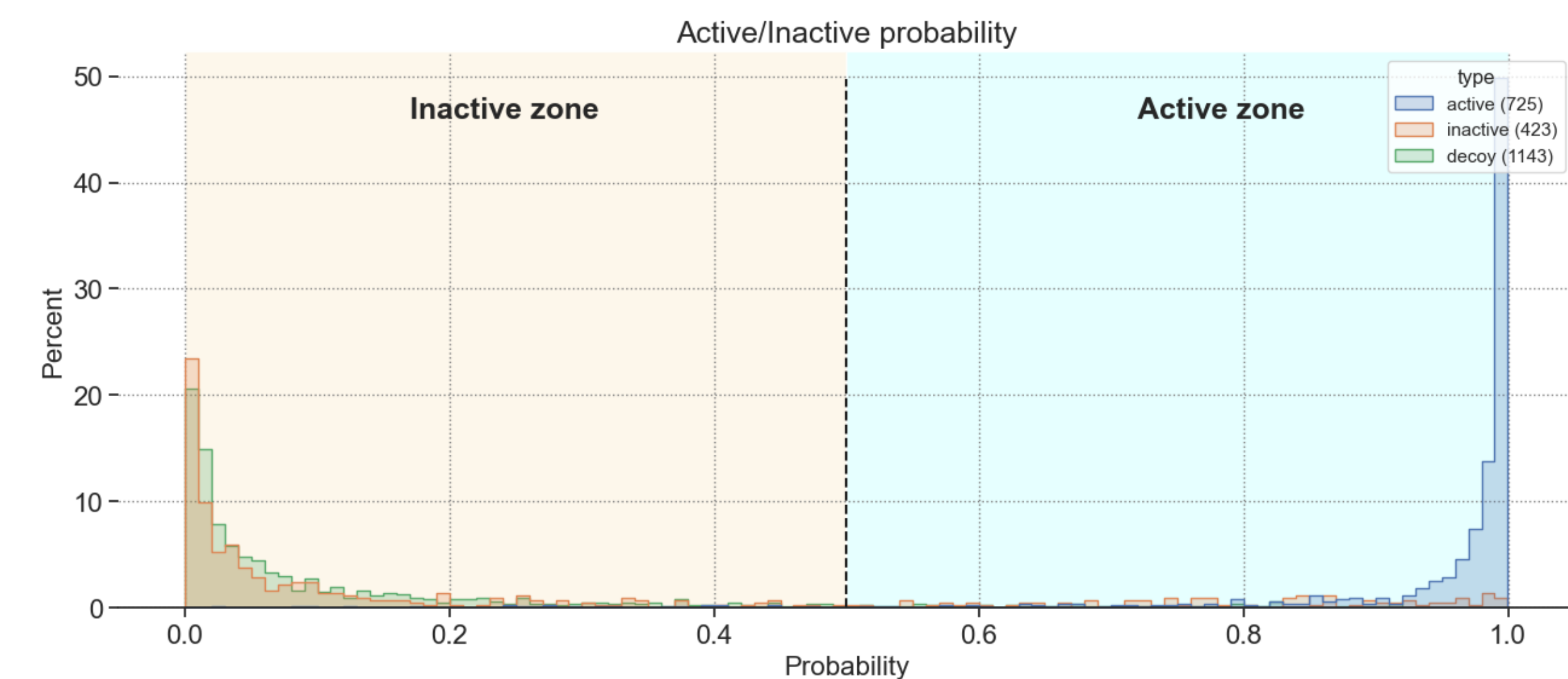
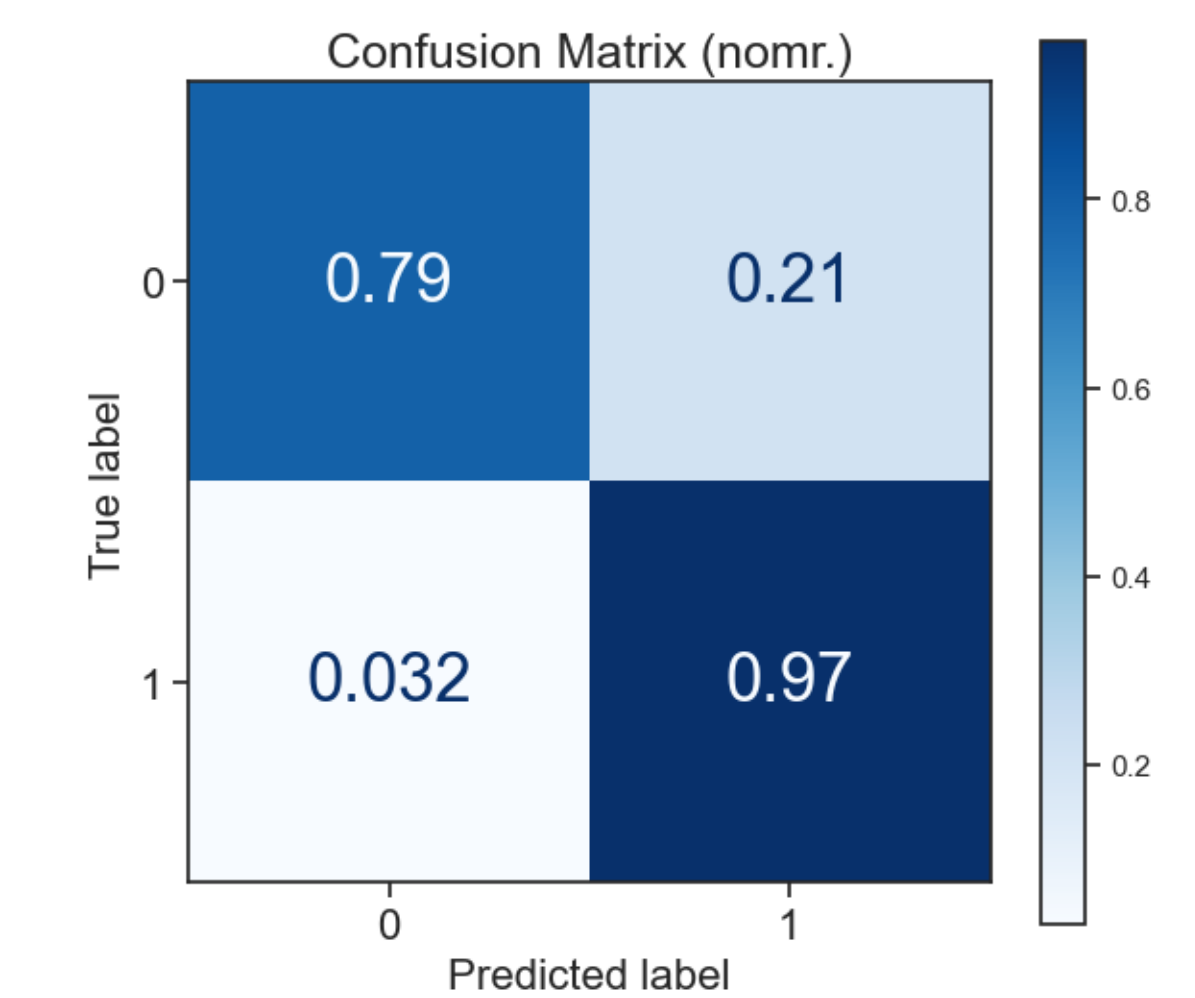
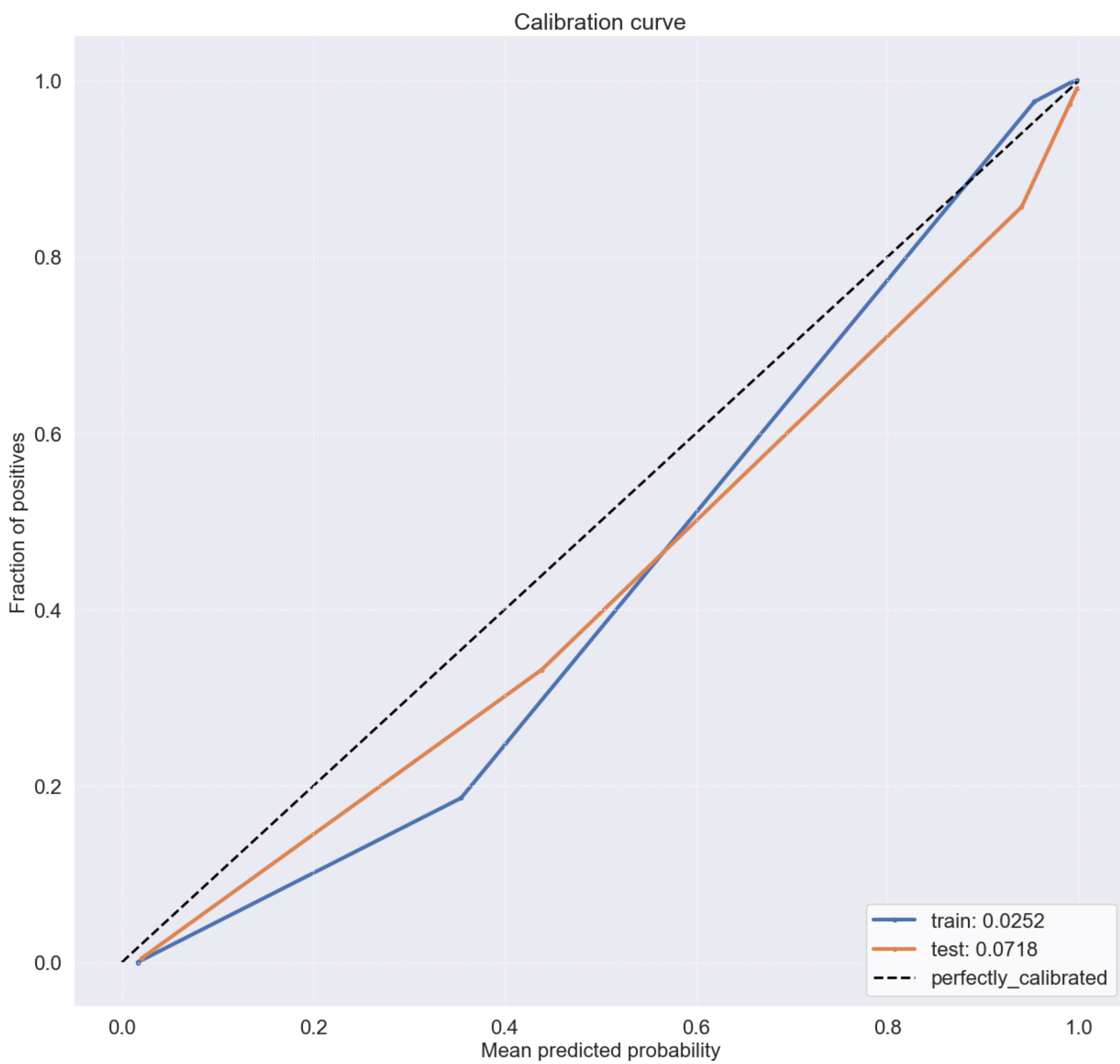
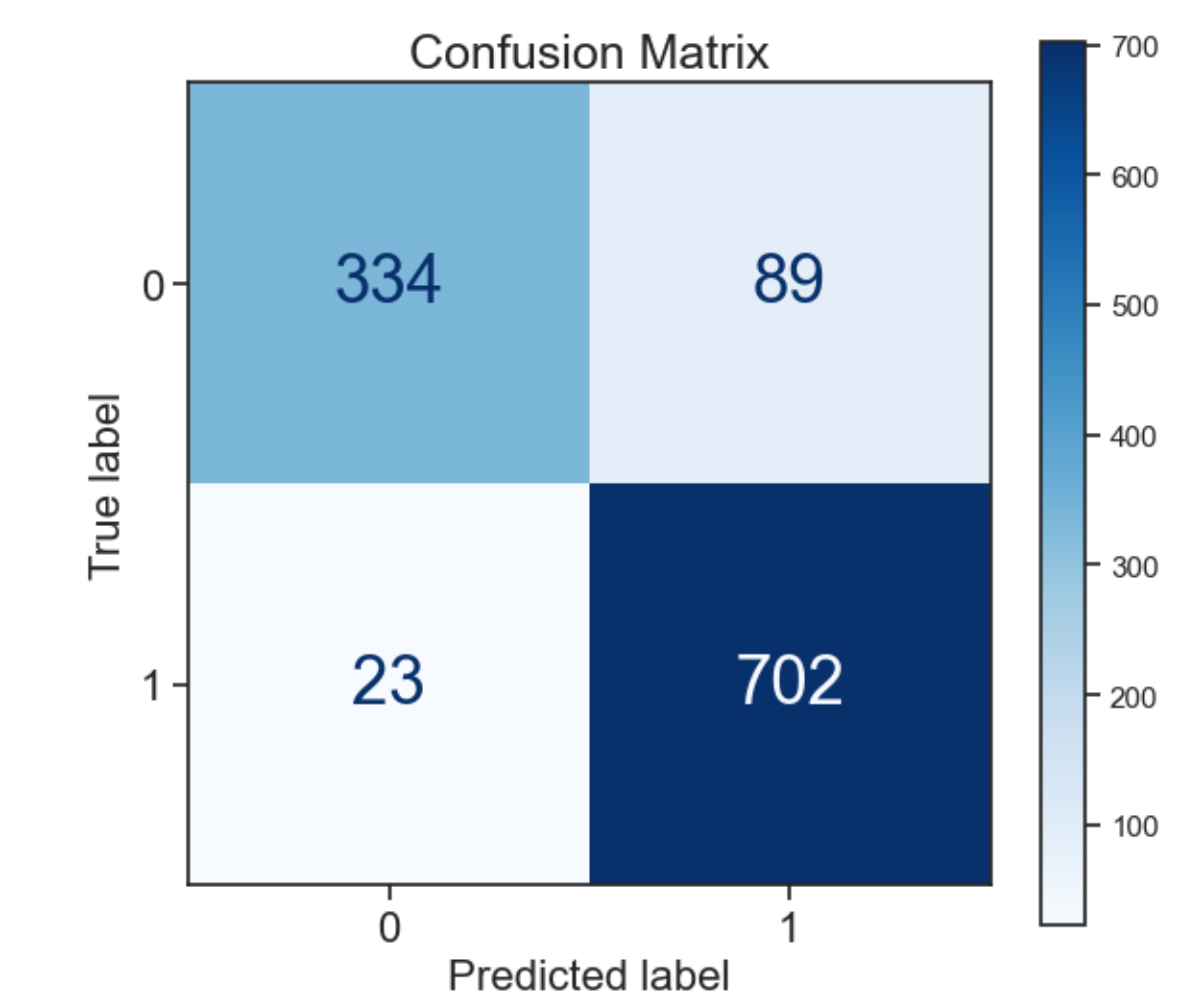


Protein: P56817 - metric: balanced\_accuracy



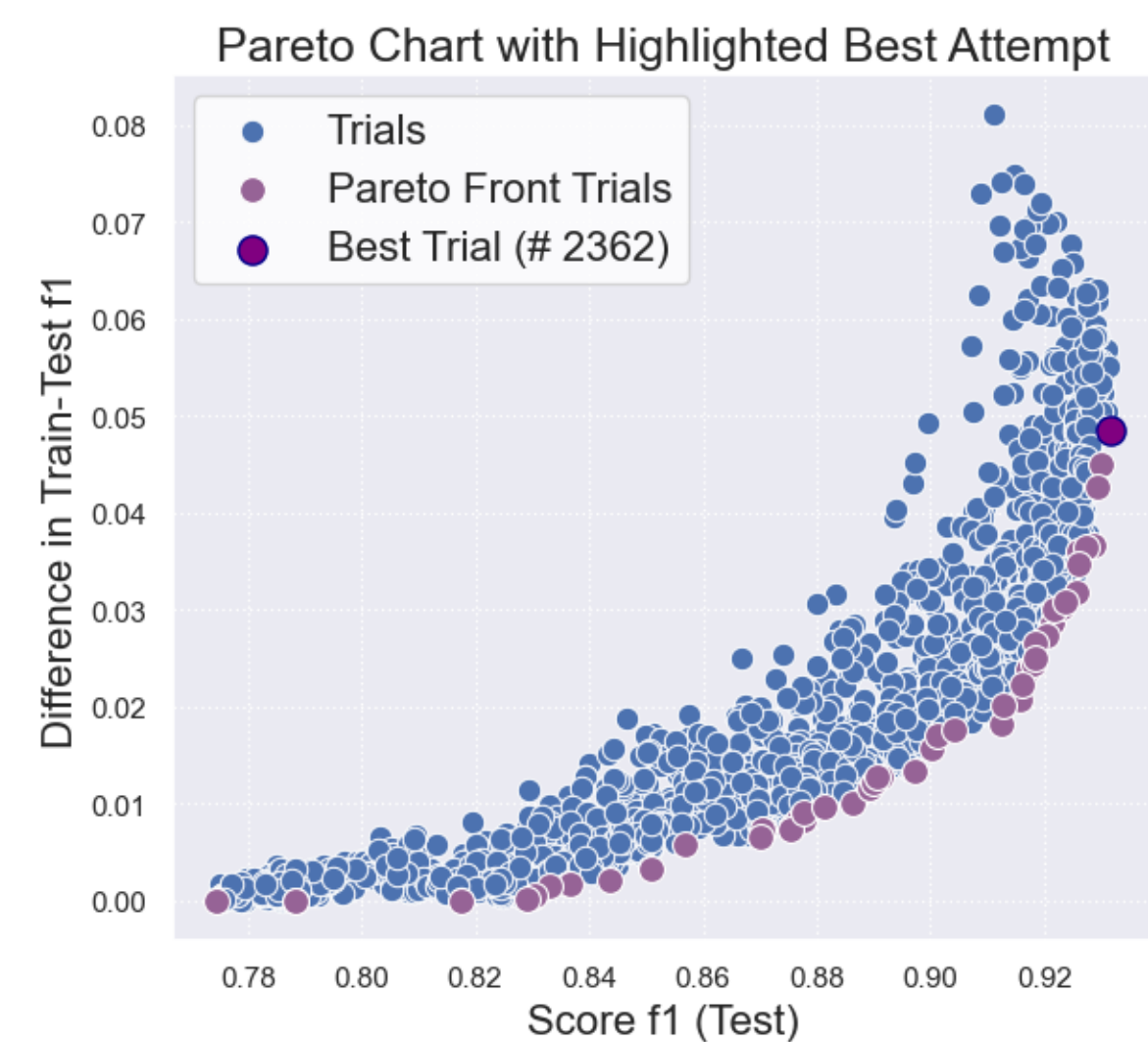
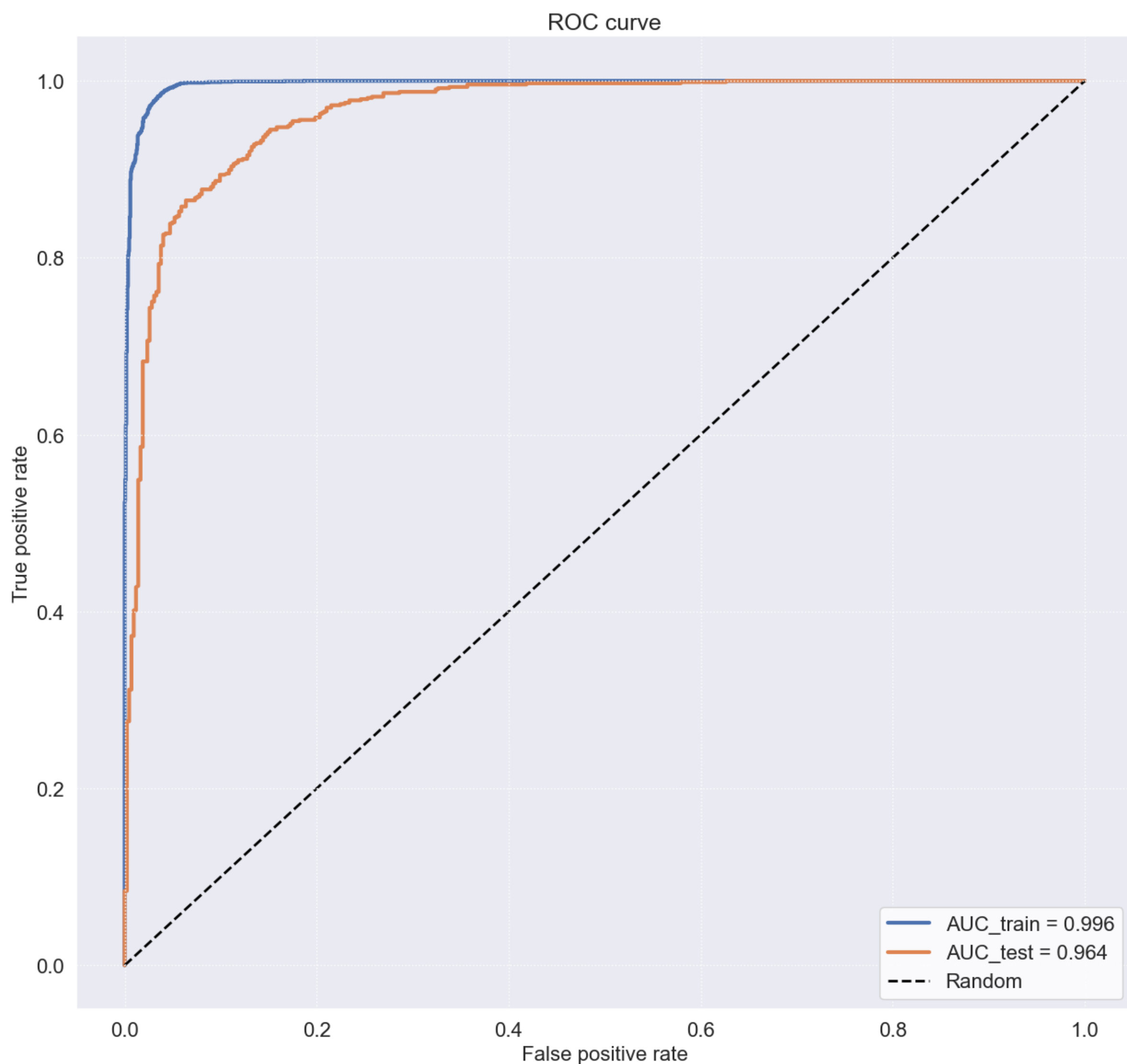
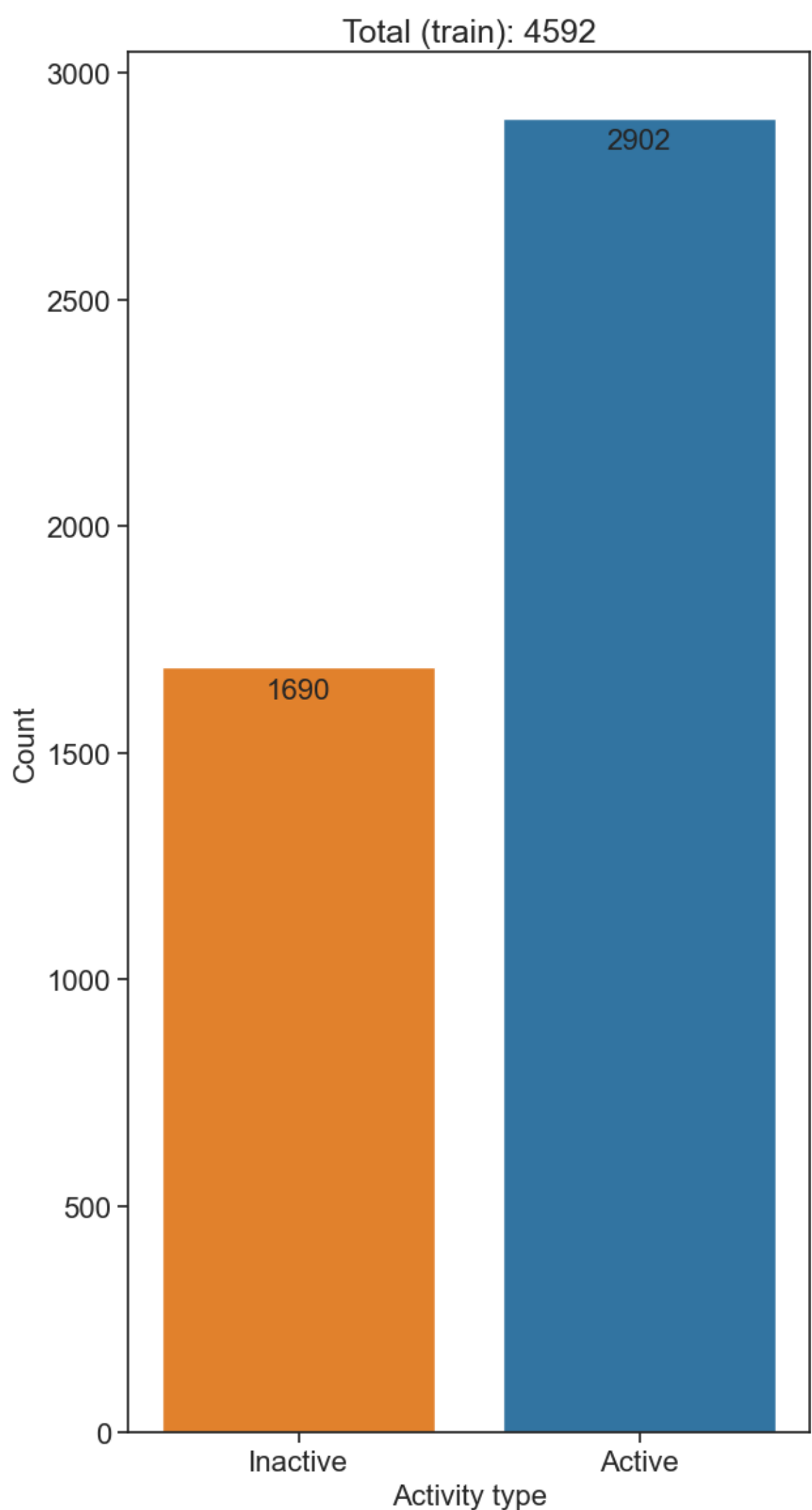
XGBoost Parameters	Value
alpha	2.4795
colsample_bytree	0.5157
gamma	0.4708
lambda	2.2155
learning_rate	0.0721
max_depth	9.0
min_child_weight	3.0
n_estimators	569.0
reg_alpha	0.4314
reg_lambda	0.8586
scale_pos_weight	2.7138
subsample	0.5553



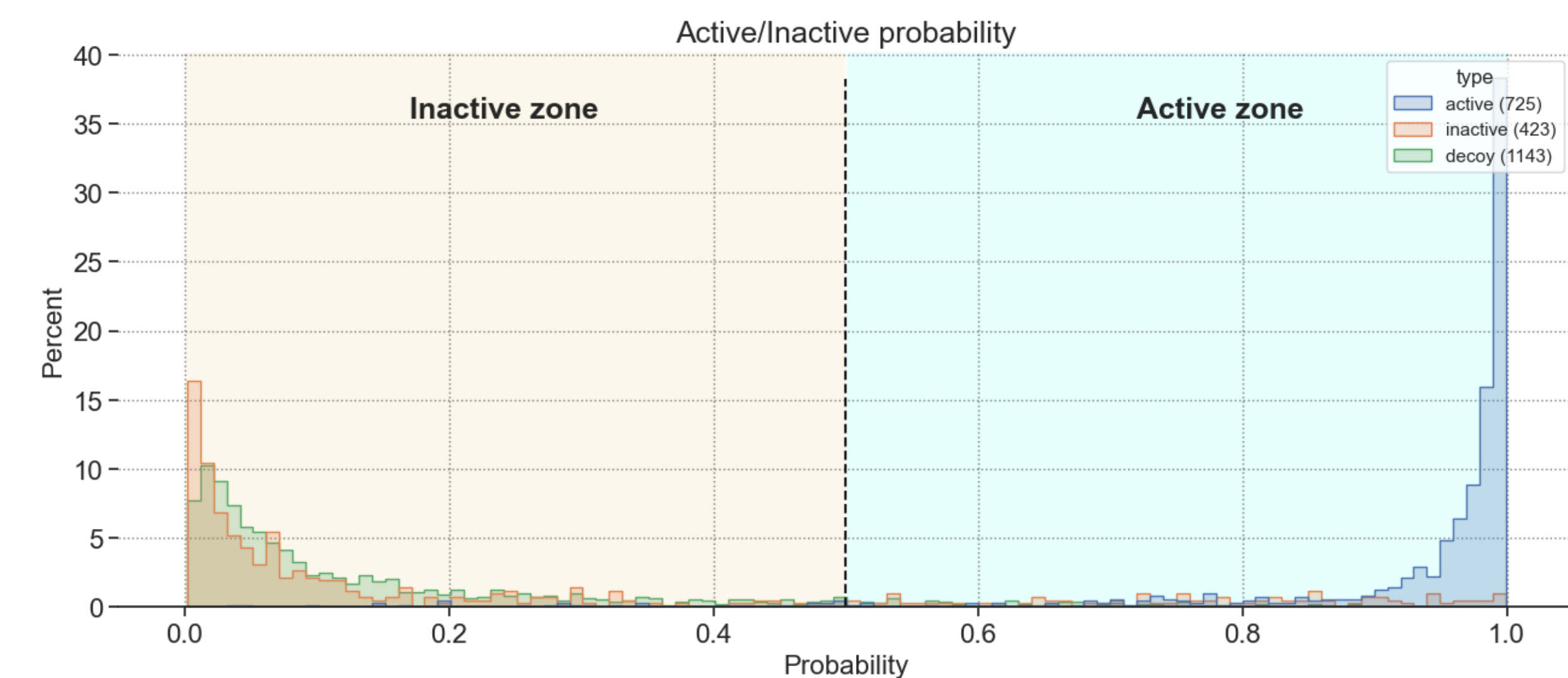
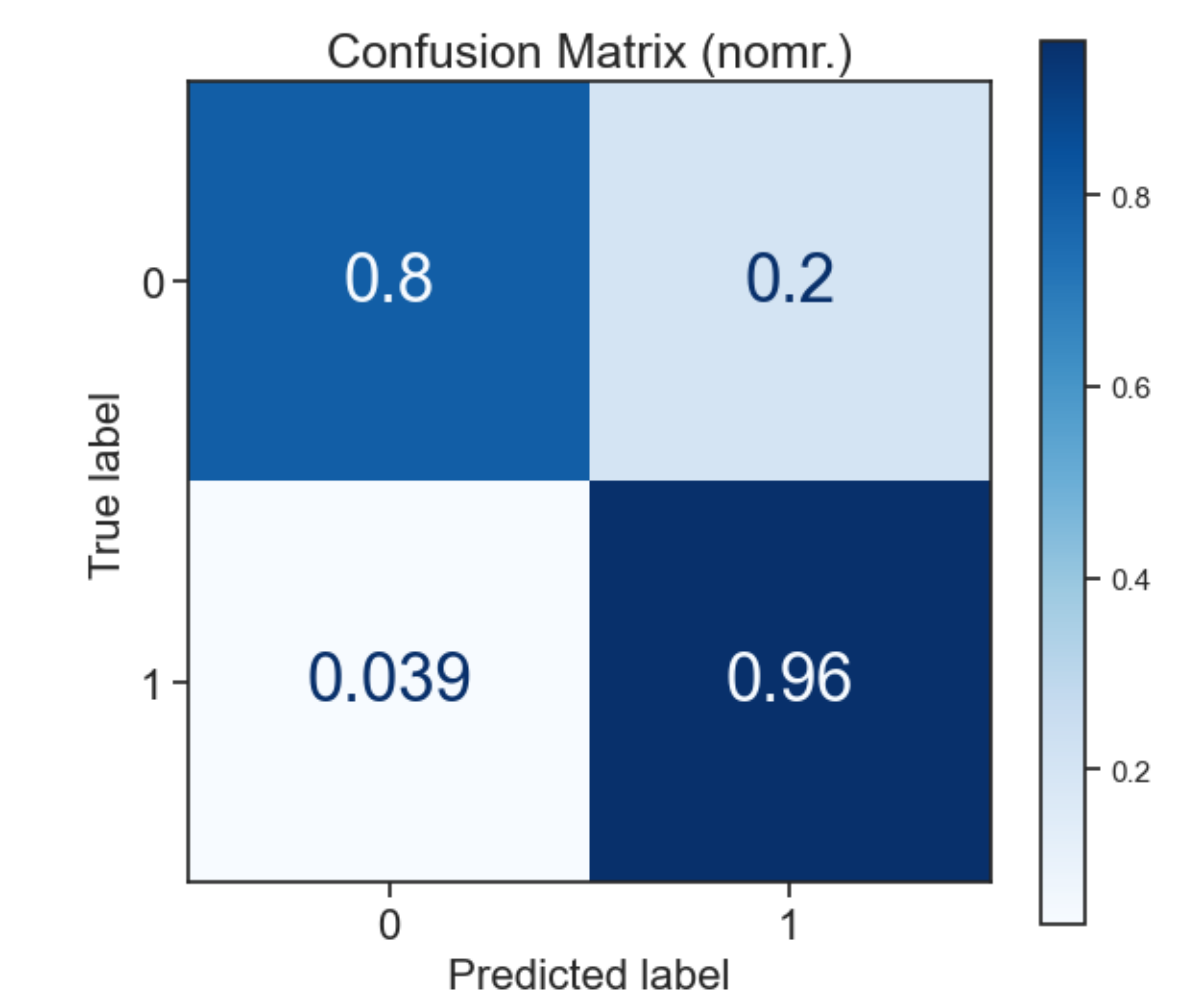
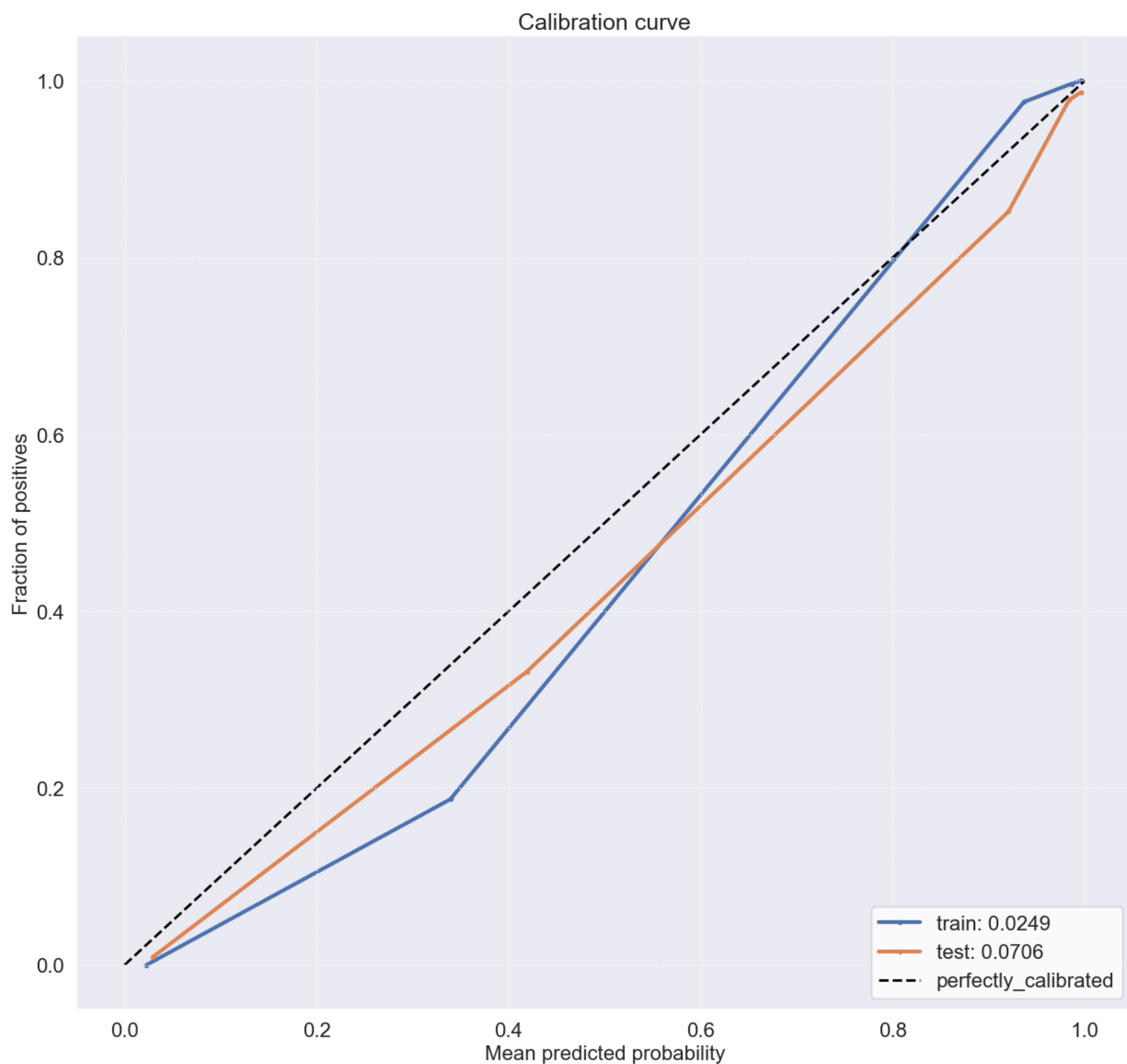
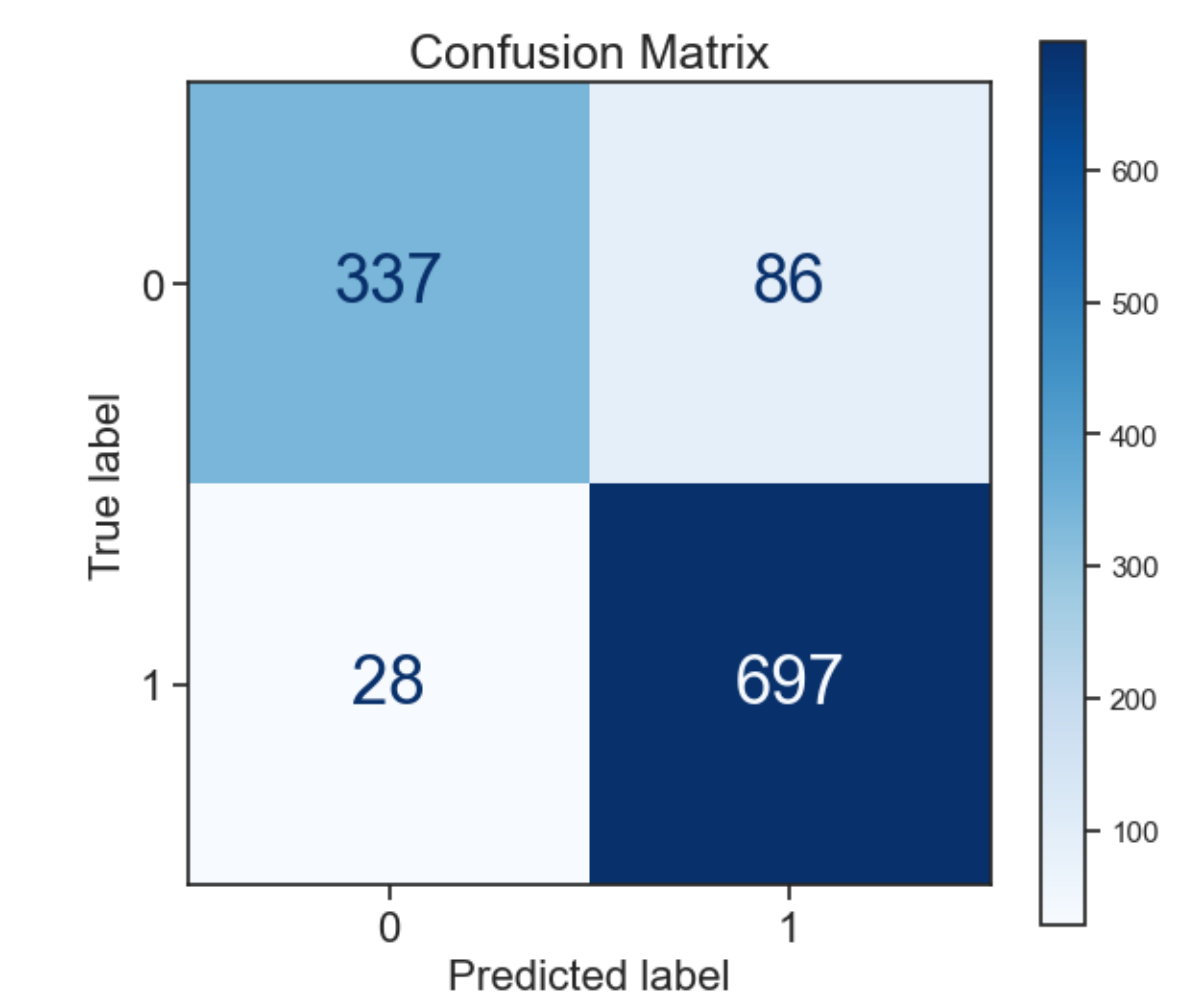
Metric	Train	Test
AUC	0.9961	0.9649
accuracy	0.9713	0.9024
balanced accuracy	0.9614	0.8789
recall_(sens)	0.9986	0.9683
specificity	0.9243	0.7896
precision	0.9577	0.8875
f1_score	0.971	0.9004



Protein: P56817 - metric: f1



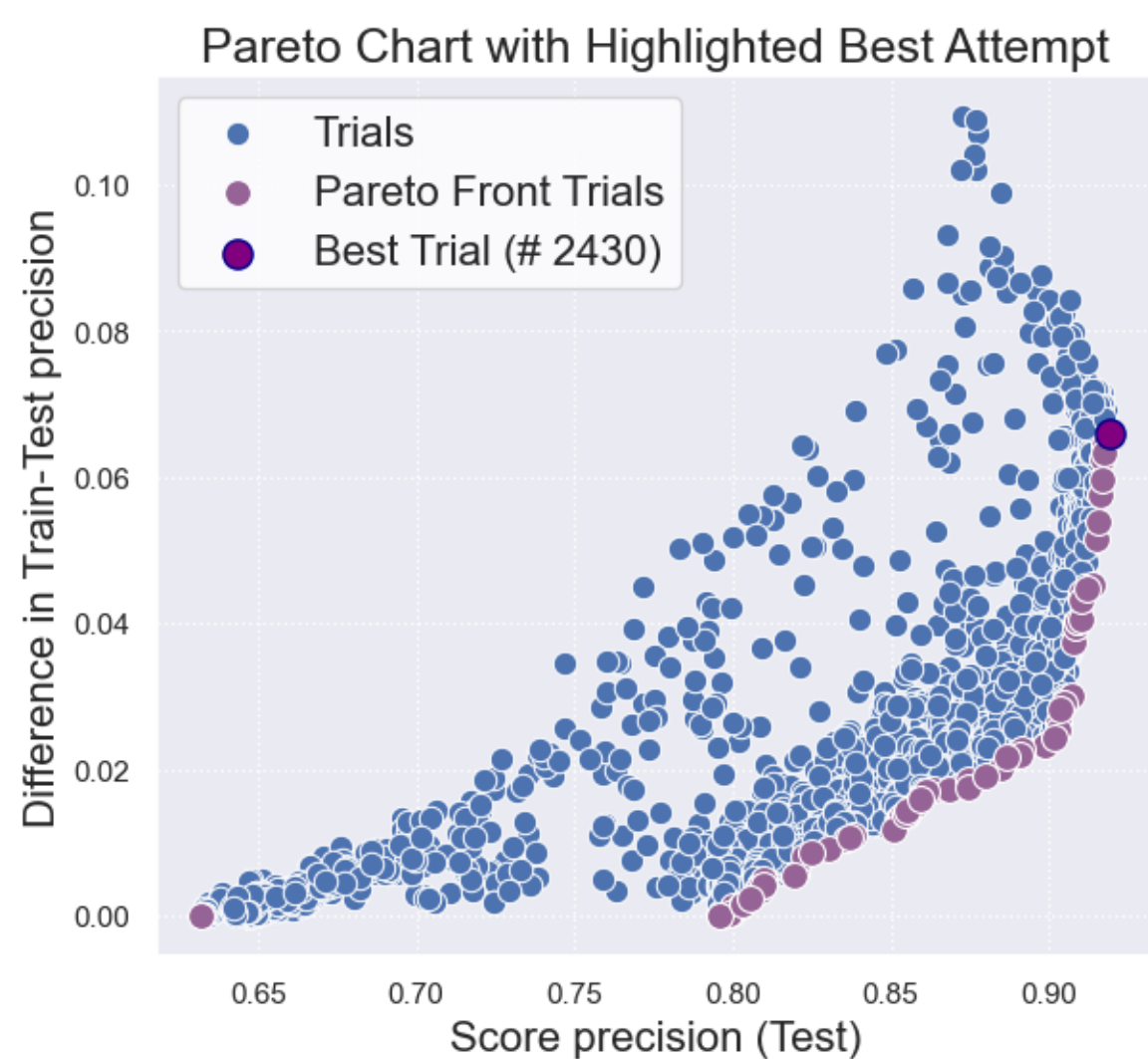
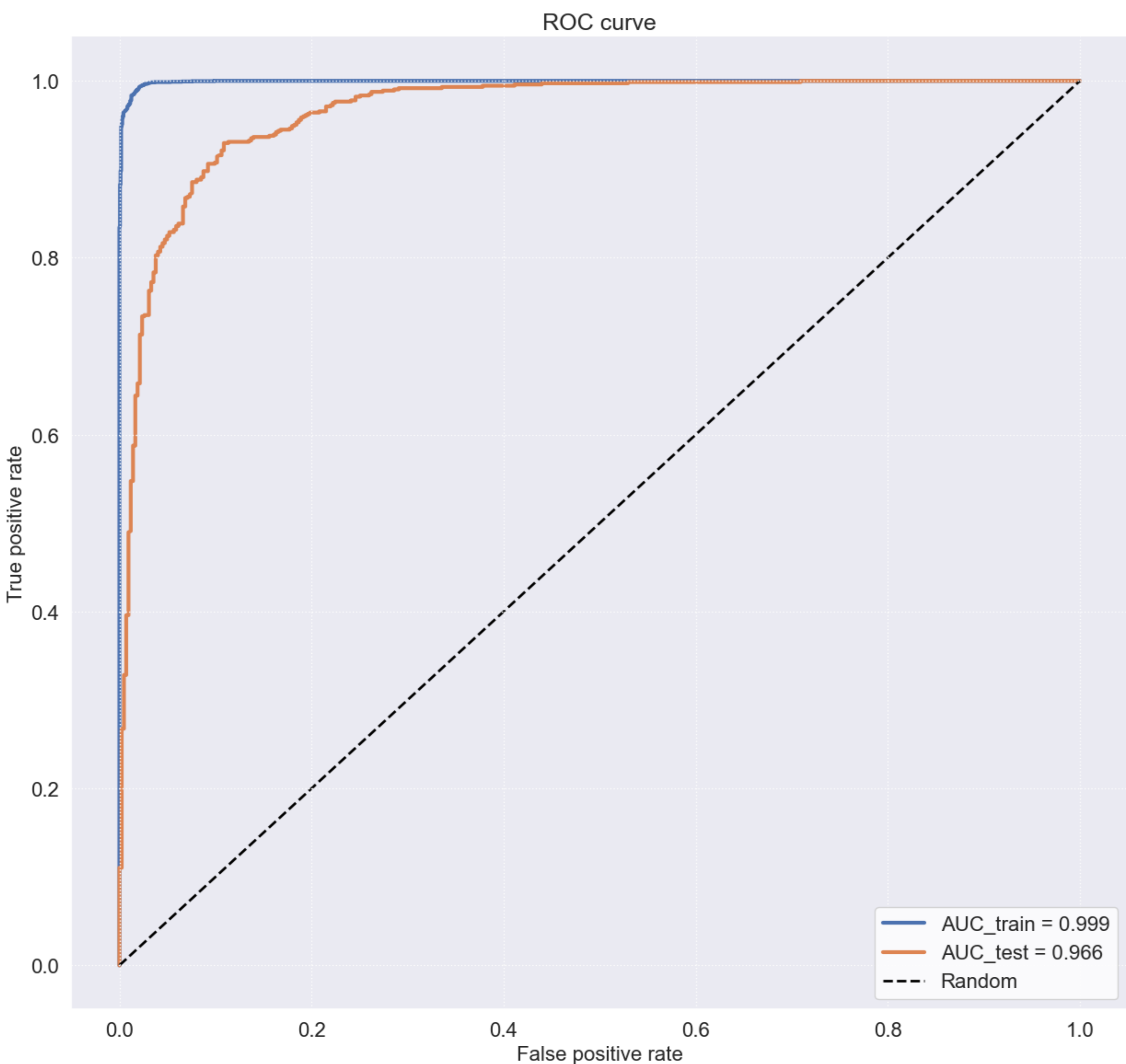
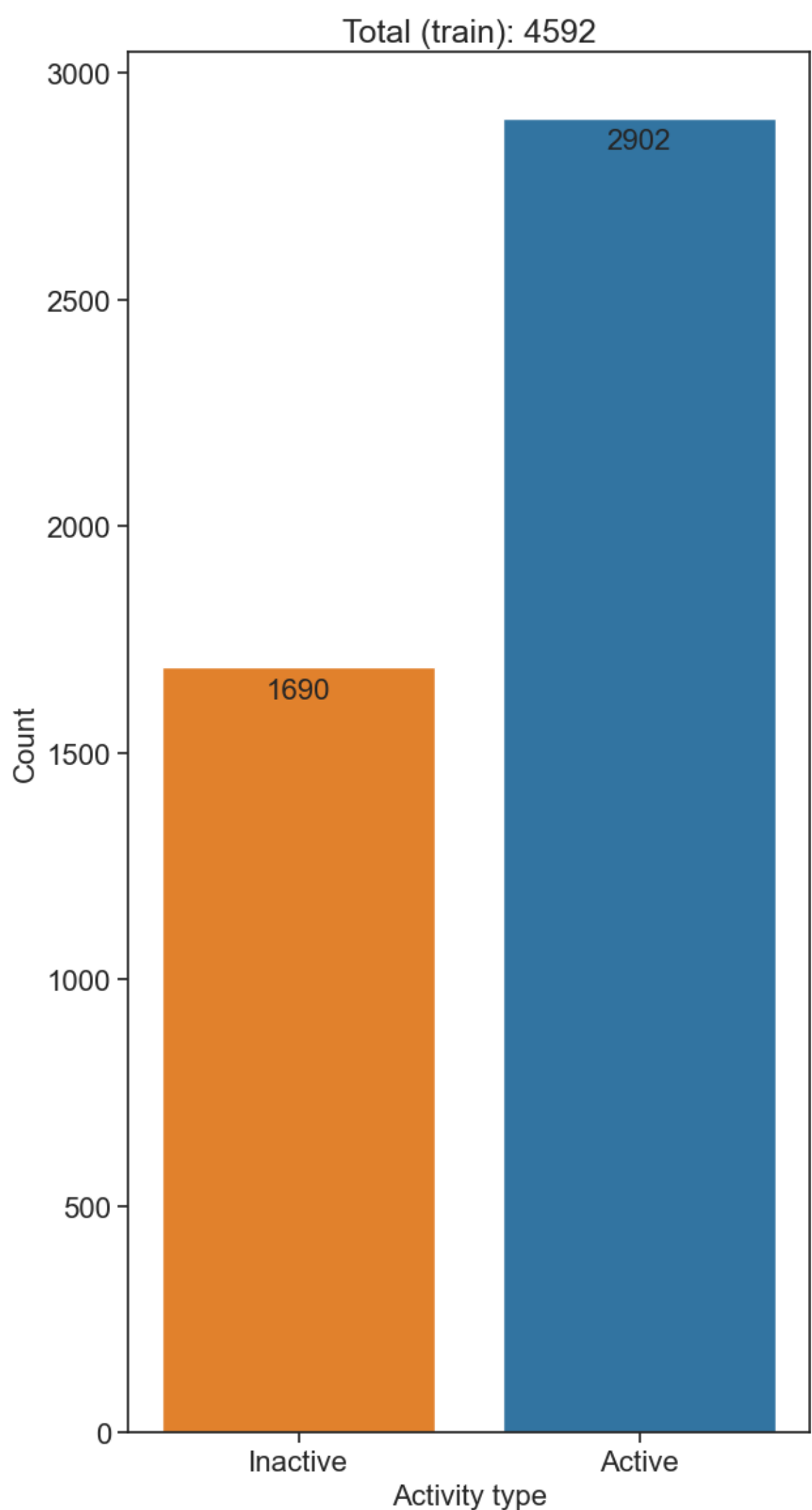
XGBoost Parameters	Value
alpha	1.4841
colsample_bytree	0.6248
gamma	0.0374
lambda	1.4728
learning_rate	0.0294
max_depth	8.0
min_child_weight	1.0
n_estimators	714.0
reg_alpha	0.8102
reg_lambda	0.3176
scale_pos_weight	1.9953
subsample	0.6906



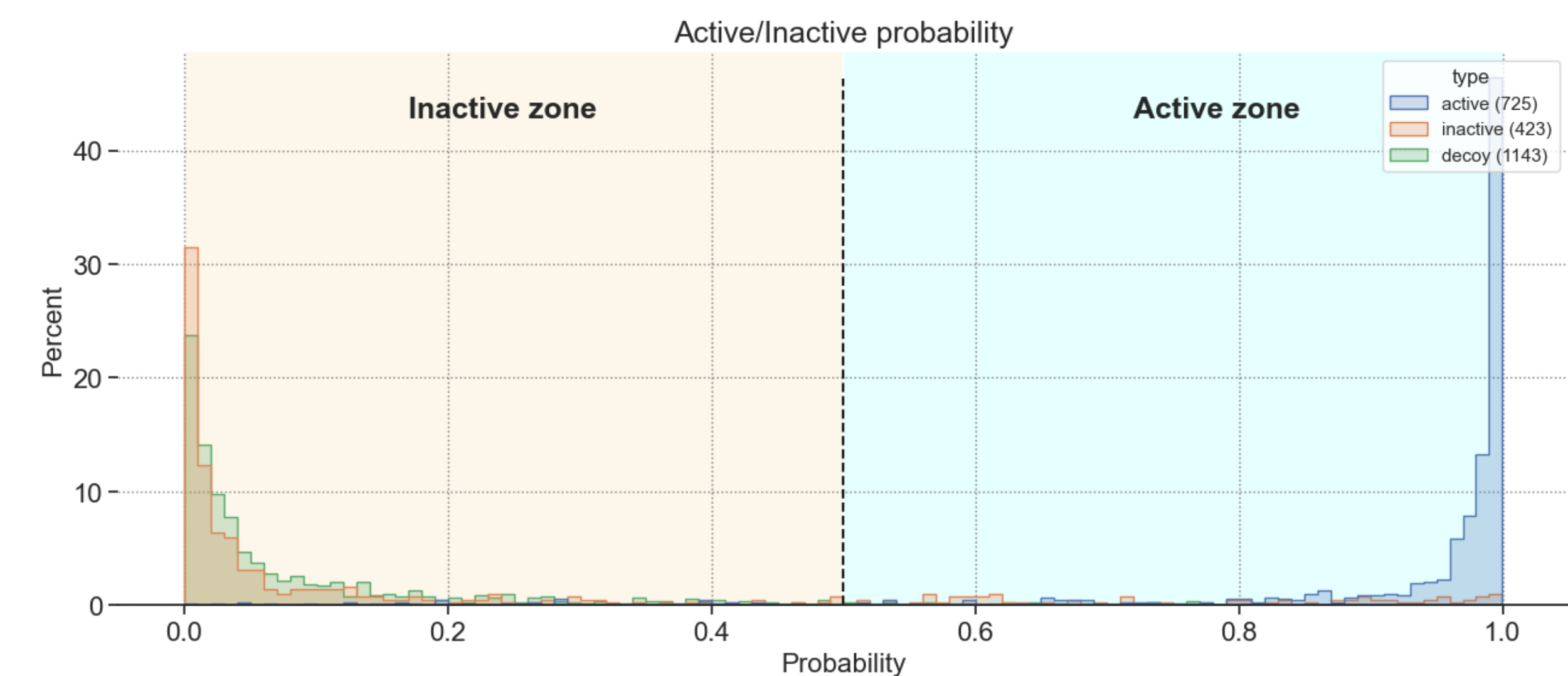
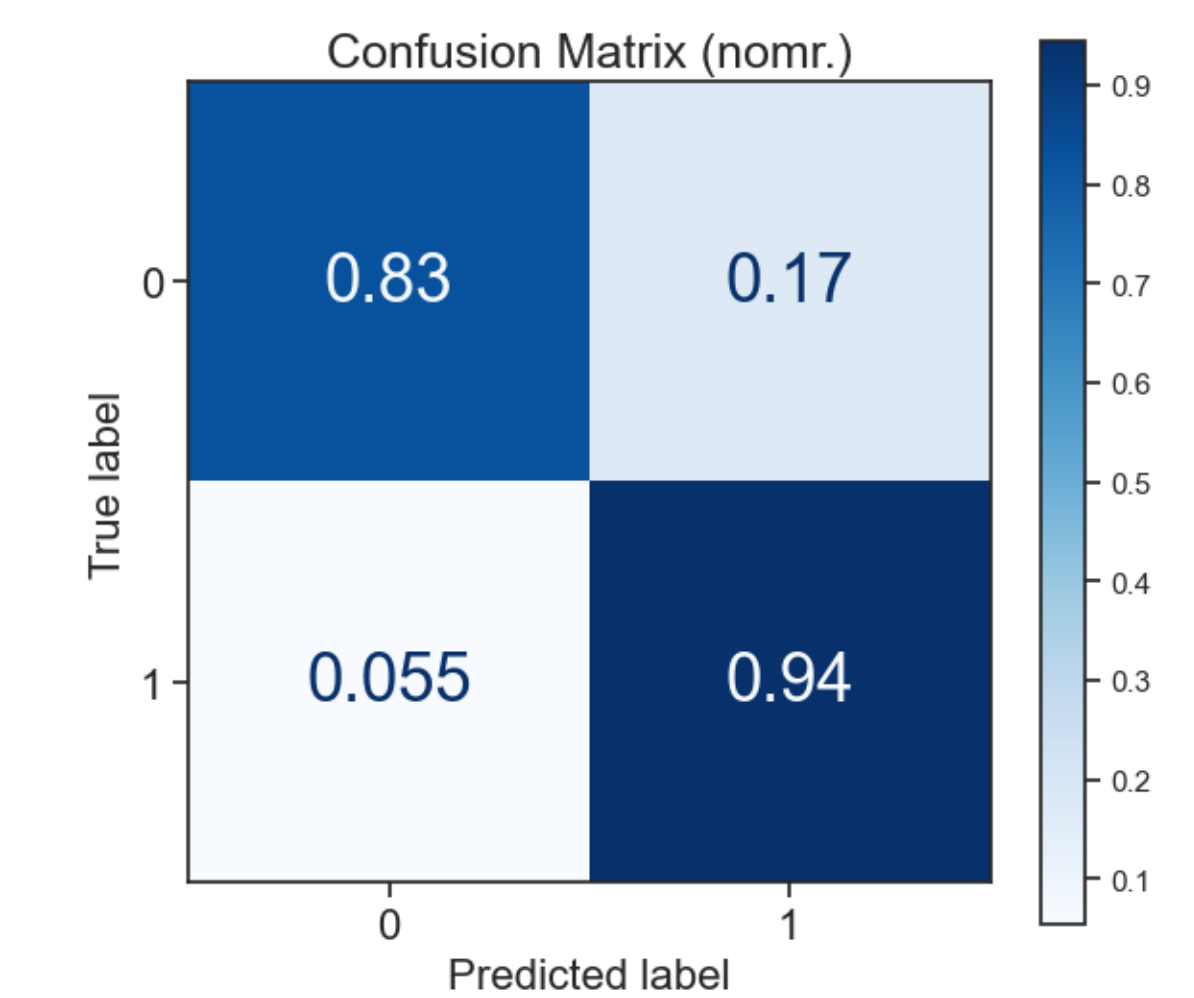
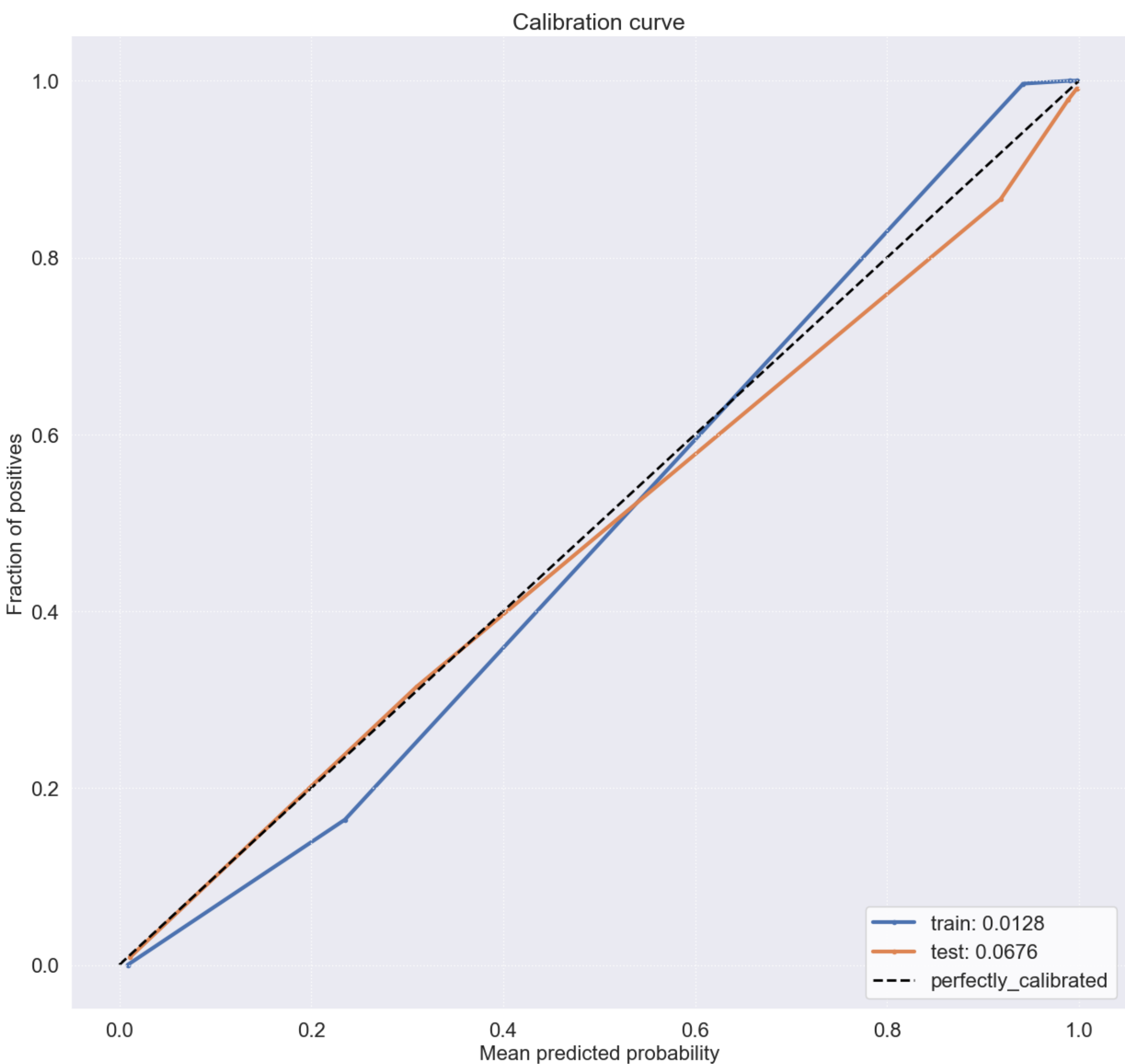
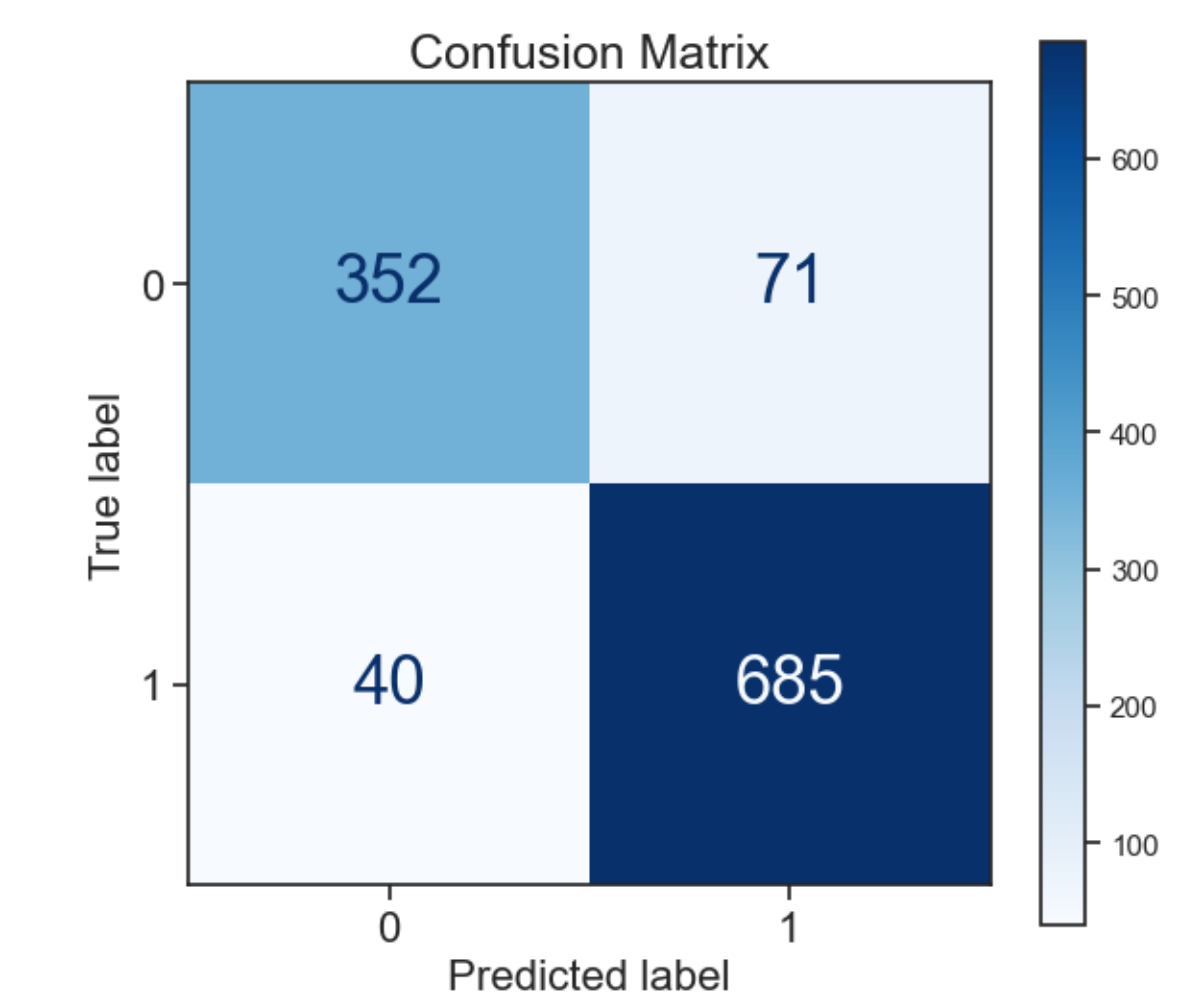
Metric	Train	Test
AUC	0.9965	0.9643
accuracy	0.9728	0.9007
balanced accuracy	0.9638	0.879
recall_(sens)	0.9979	0.9614
specificity	0.9296	0.7967
precision	0.9605	0.8902
f1_score	0.9726	0.899



Protein: P56817- metric: precision



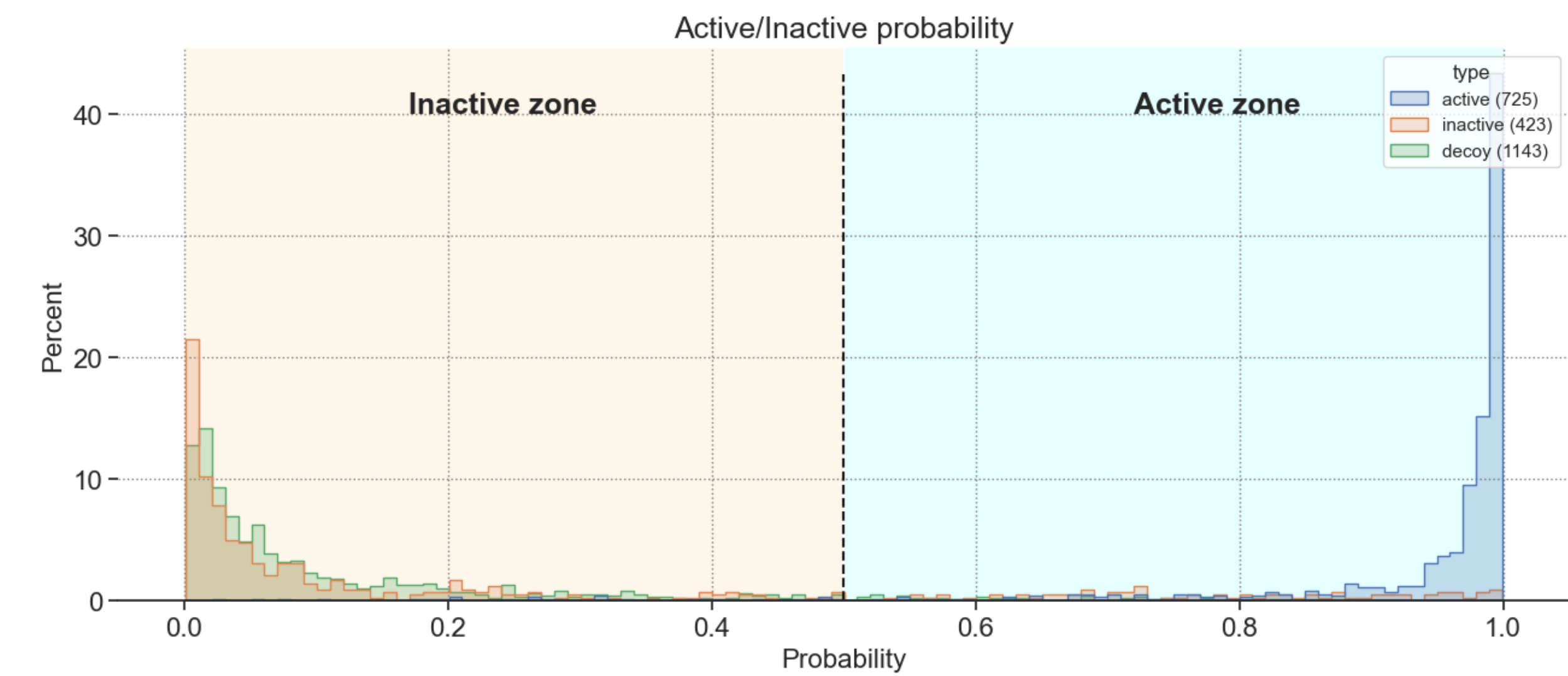
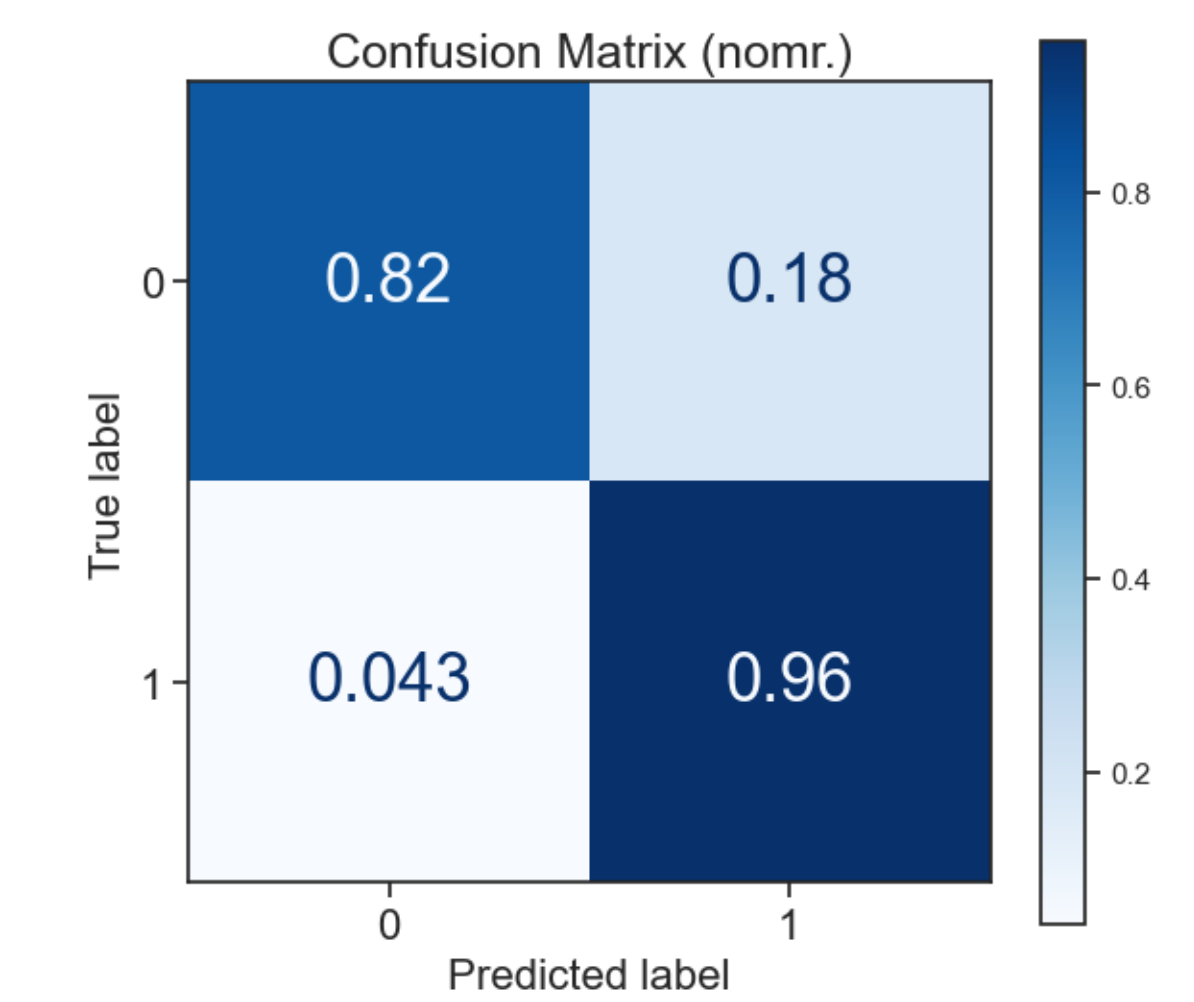
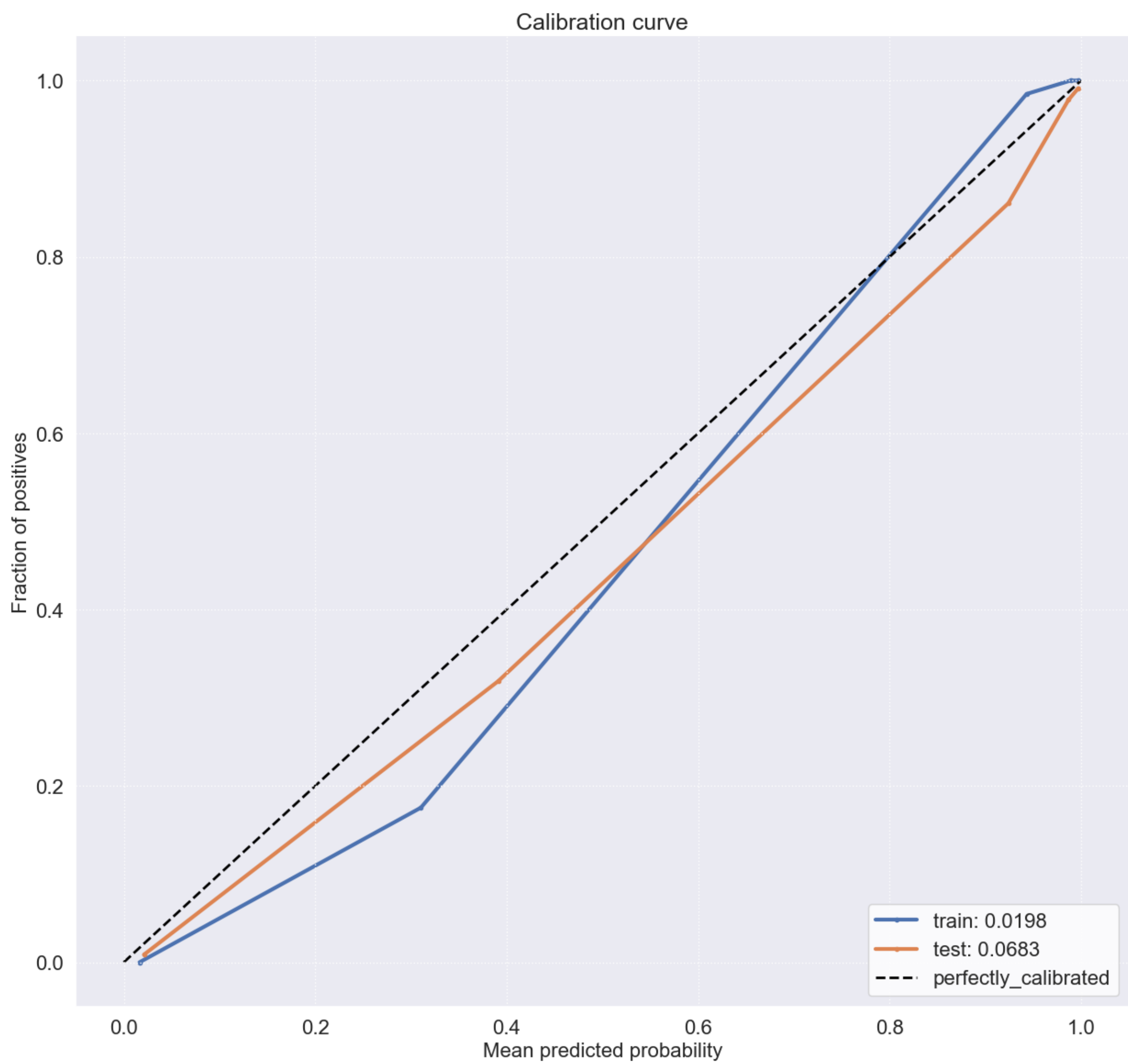
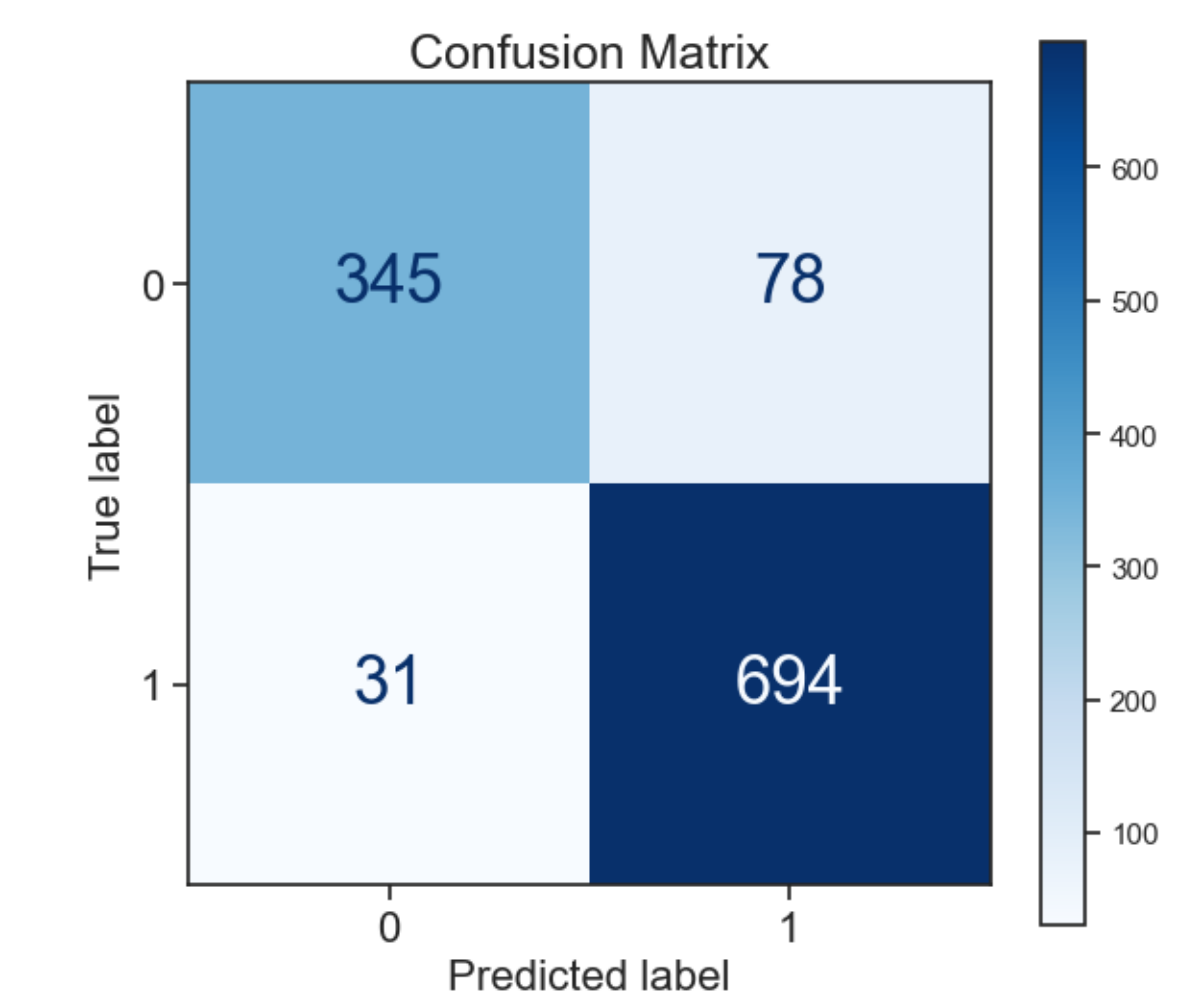
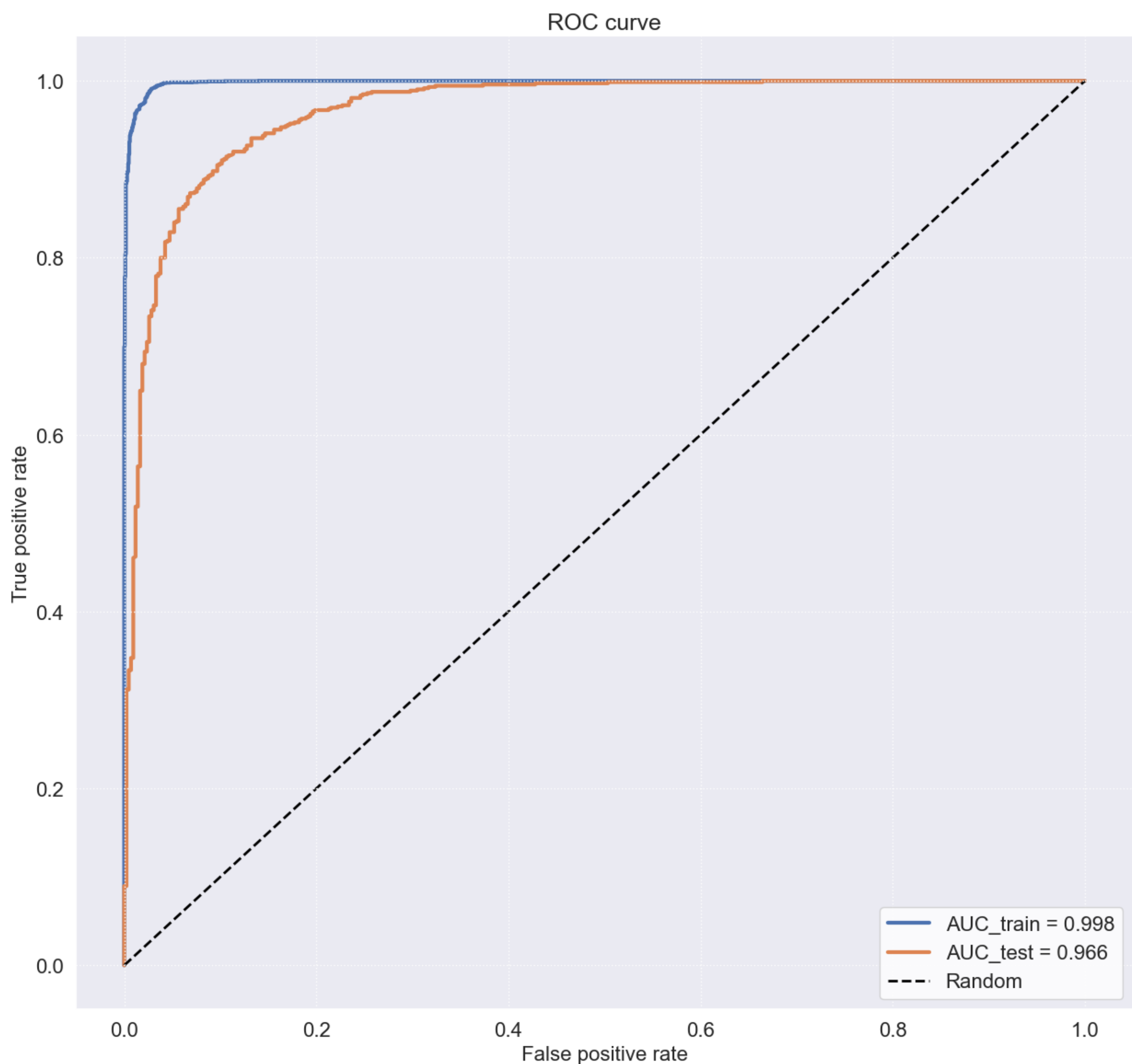
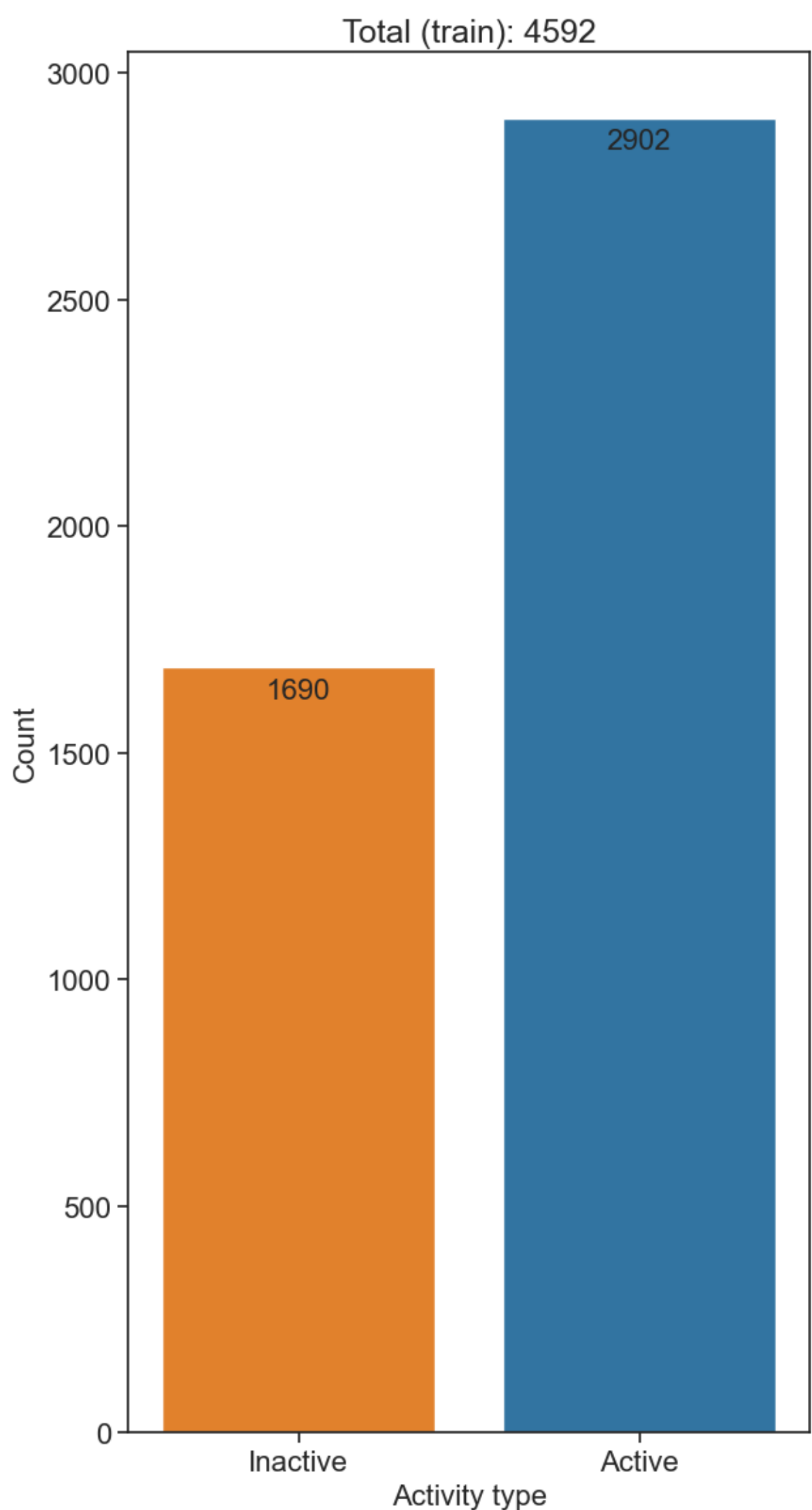
XGBoost Parameters	Value
alpha	1.0545
colsample_bytree	0.5502
gamma	0.1833
lambda	1.8003
learning_rate	0.0579
max_depth	10.0
min_child_weight	1.0
n_estimators	632.0
reg_alpha	0.5484
reg_lambda	0.3758
scale_pos_weight	1.118
subsample	0.8801



Metric	Train	Test
AUC	0.9992	0.9658
accuracy	0.9869	0.9033
balanced accuracy	0.9831	0.8885
recall_(sens)	0.9976	0.9448
specificity	0.9686	0.8322
precision	0.982	0.9061
f1_score	0.9869	0.9025



Protein: P56817 - metric: SoftVotingXGBoostEnsemble



Metric	Train	Test
AUC	0.9983	0.9659
accuracy	0.978	0.9051
balanced accuracy	0.9707	0.8864
recall_(sens)	0.9983	0.9572
specificity	0.9432	0.8156
precision	0.9679	0.899
f1_score	0.9779	0.9038