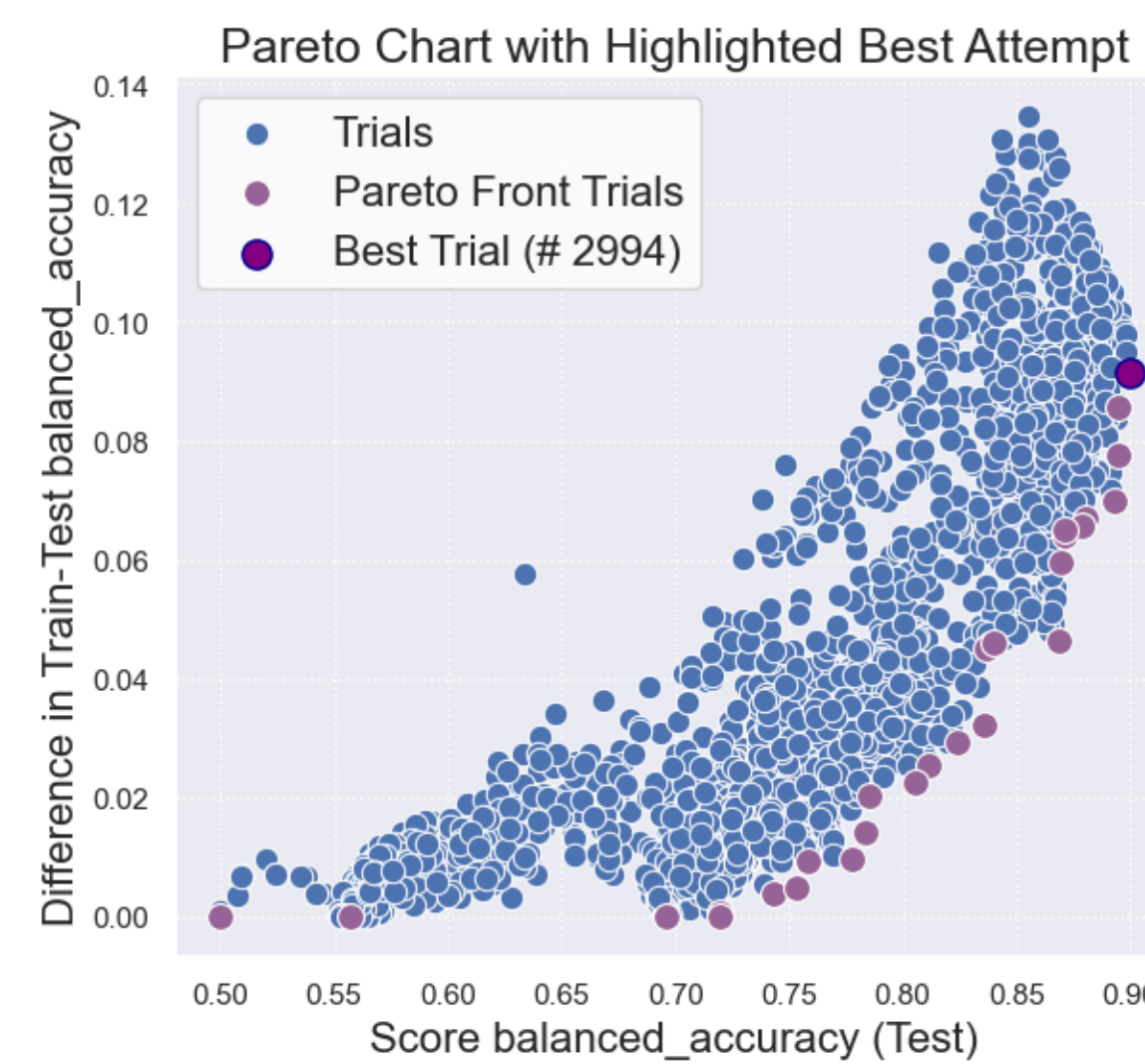
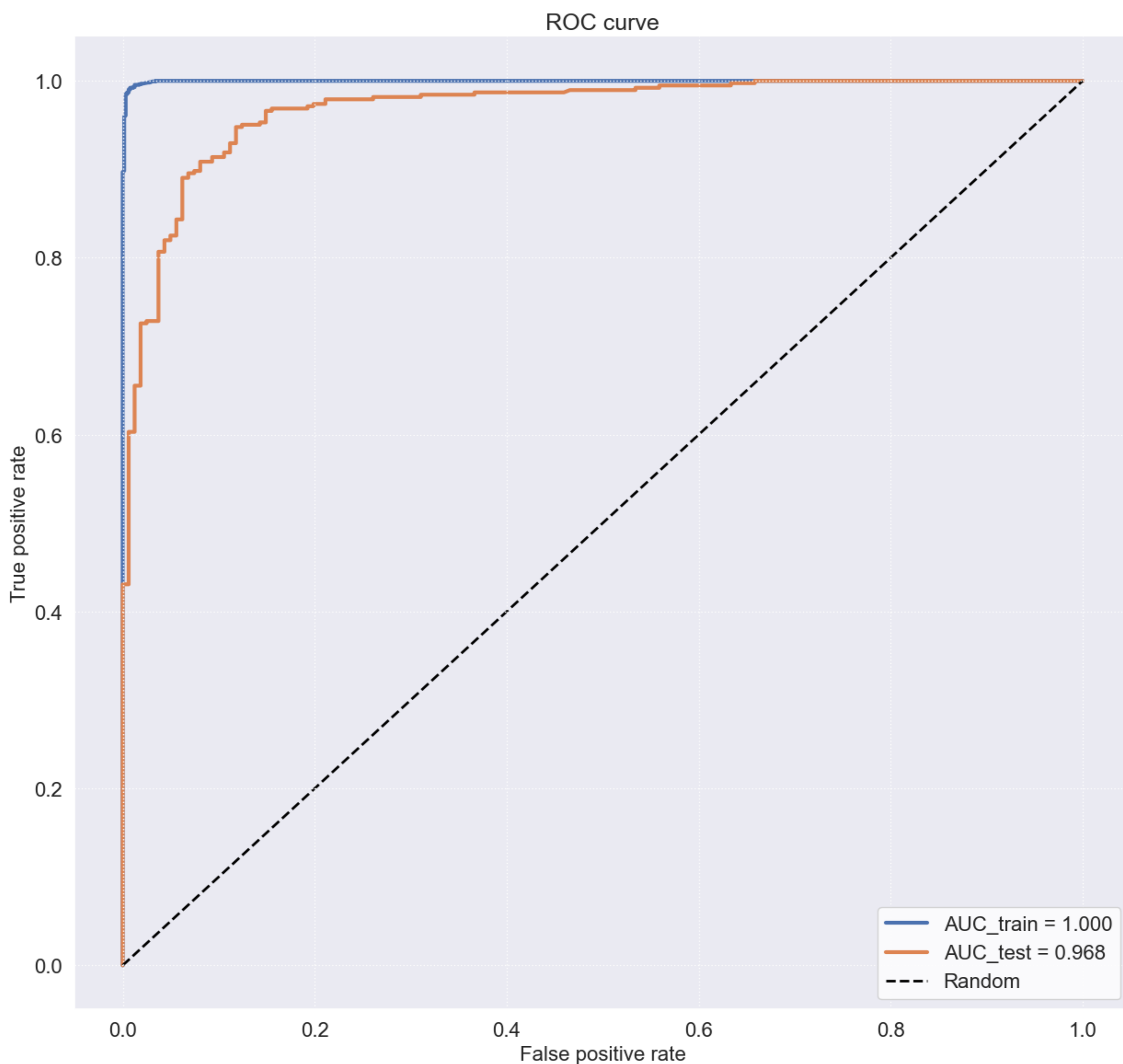
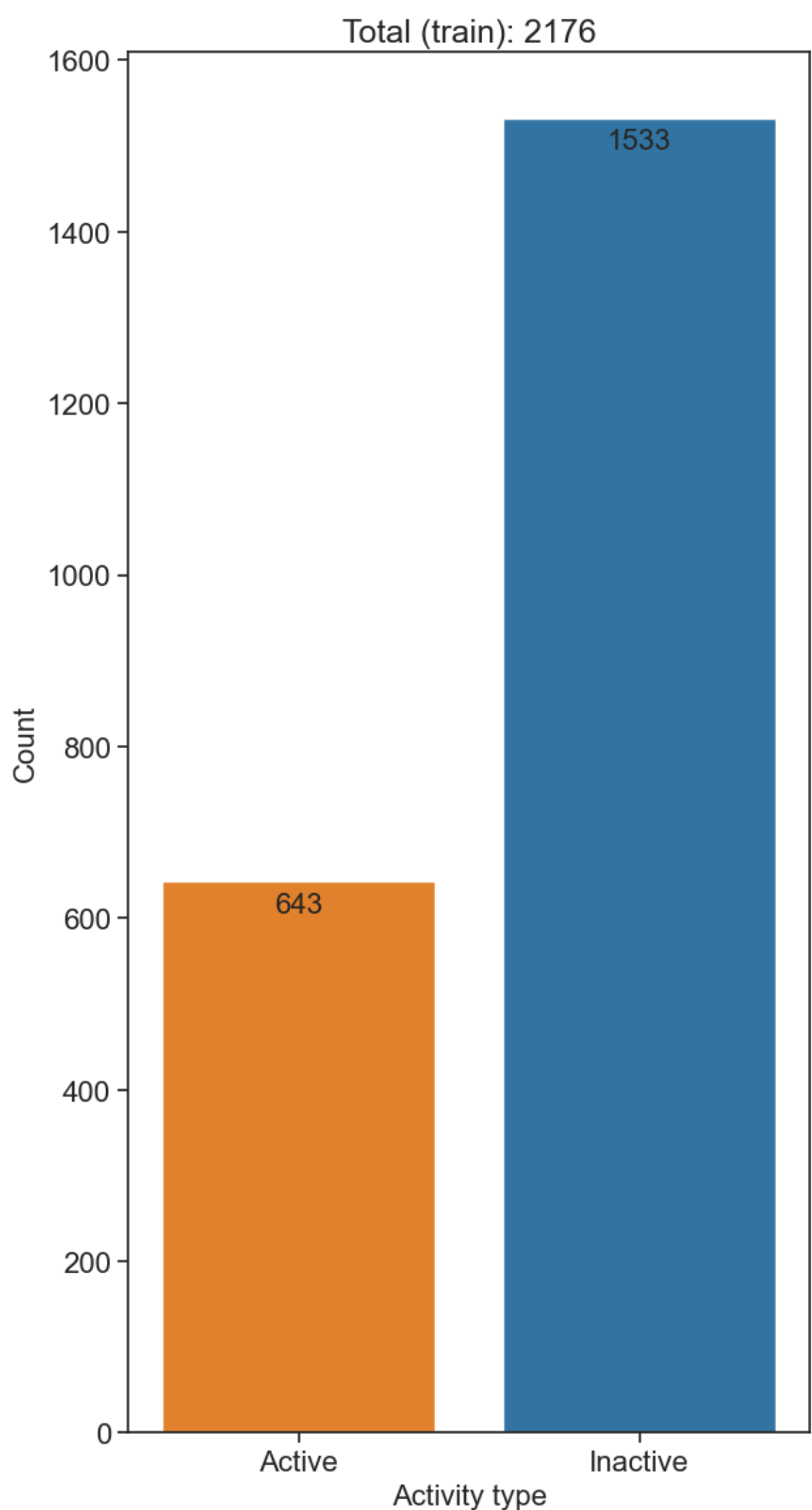
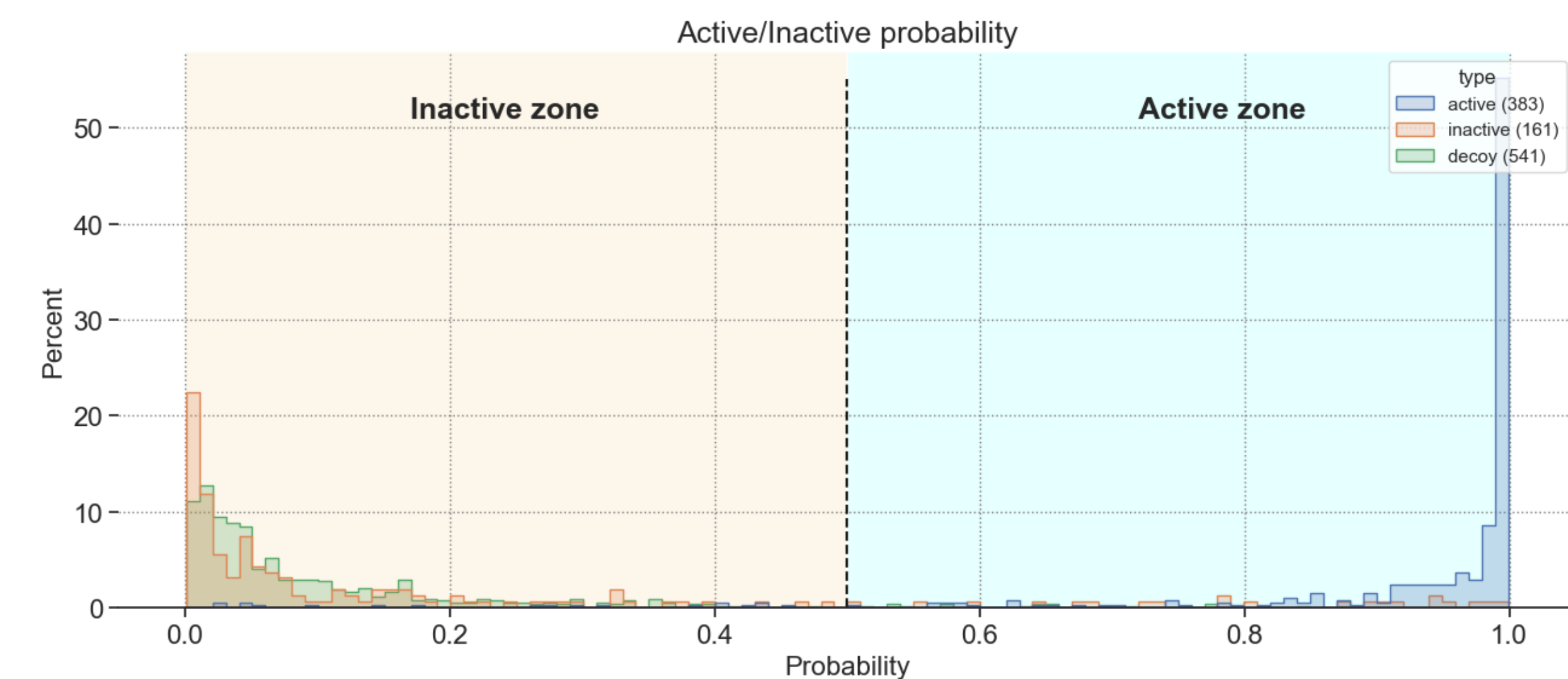
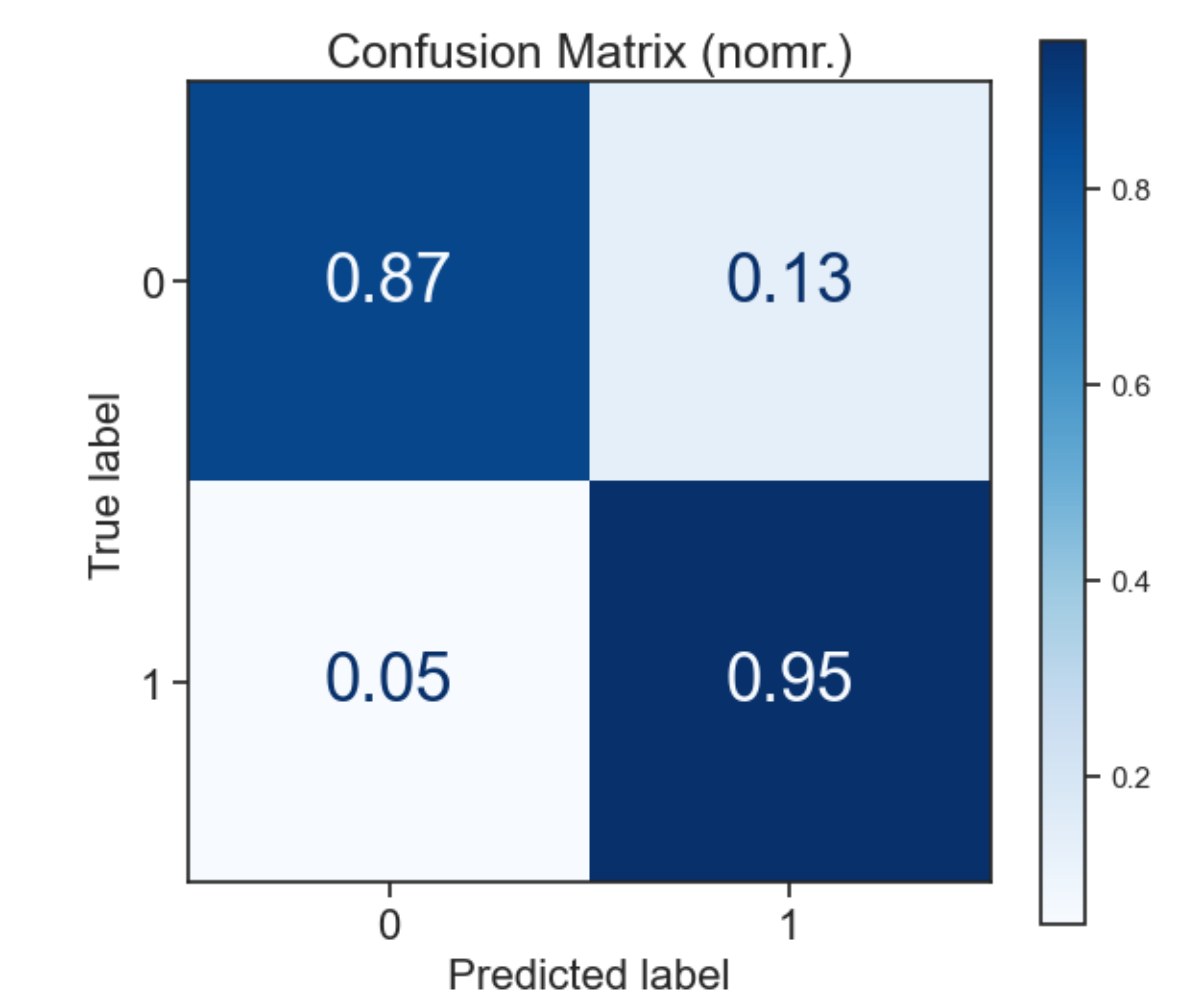
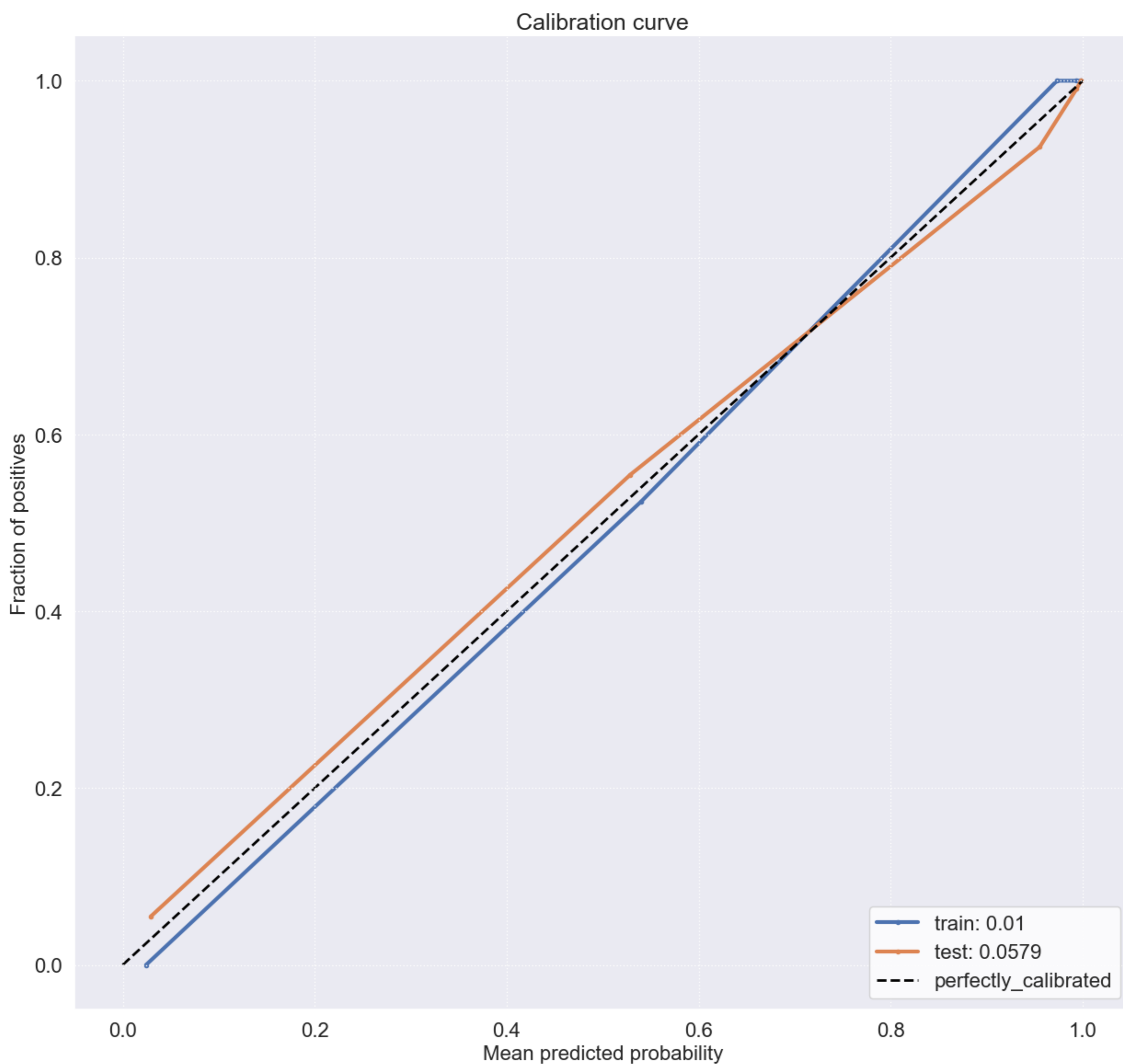
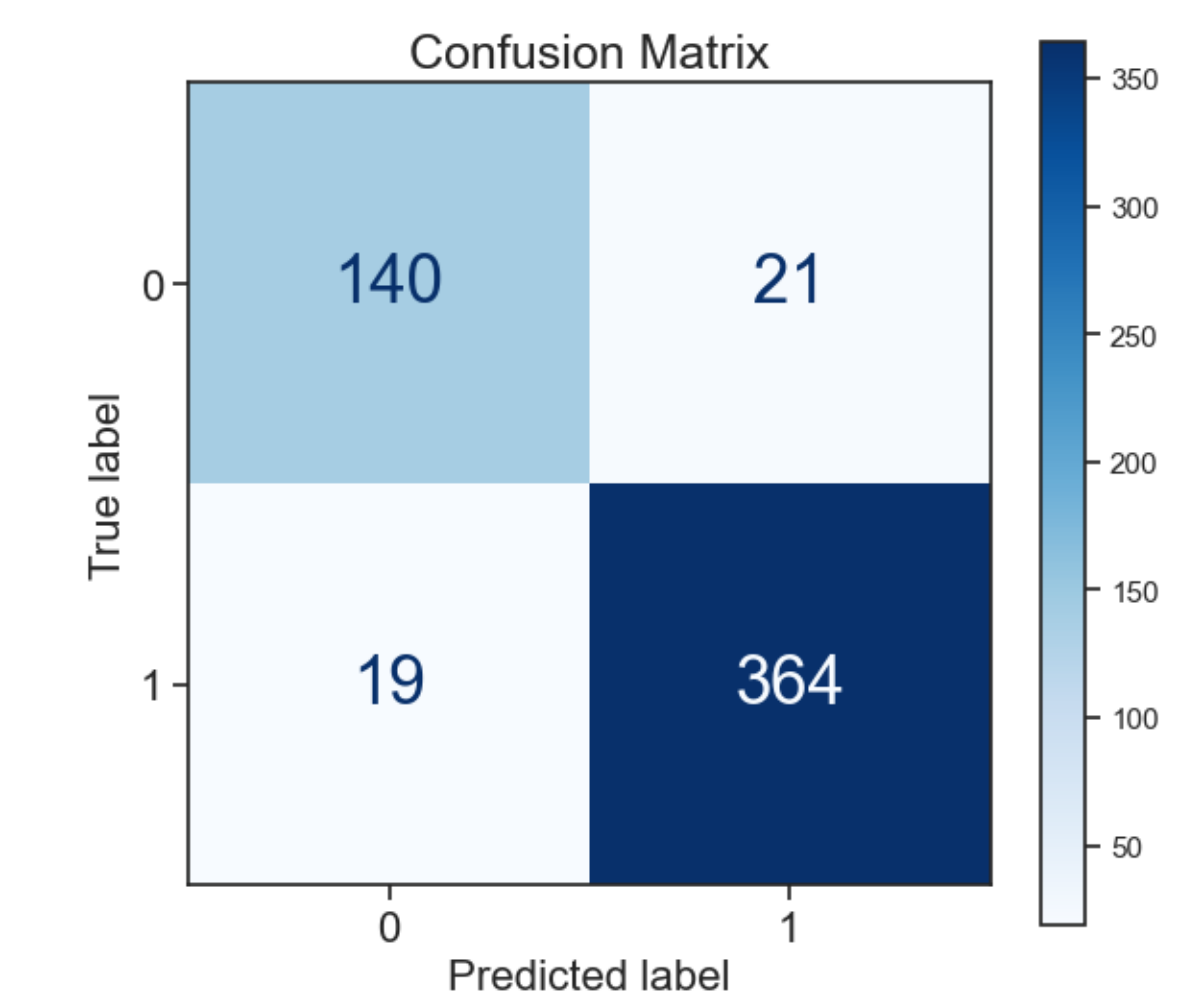


Protein: Q9UBN7 - metric: balanced\_accuracy



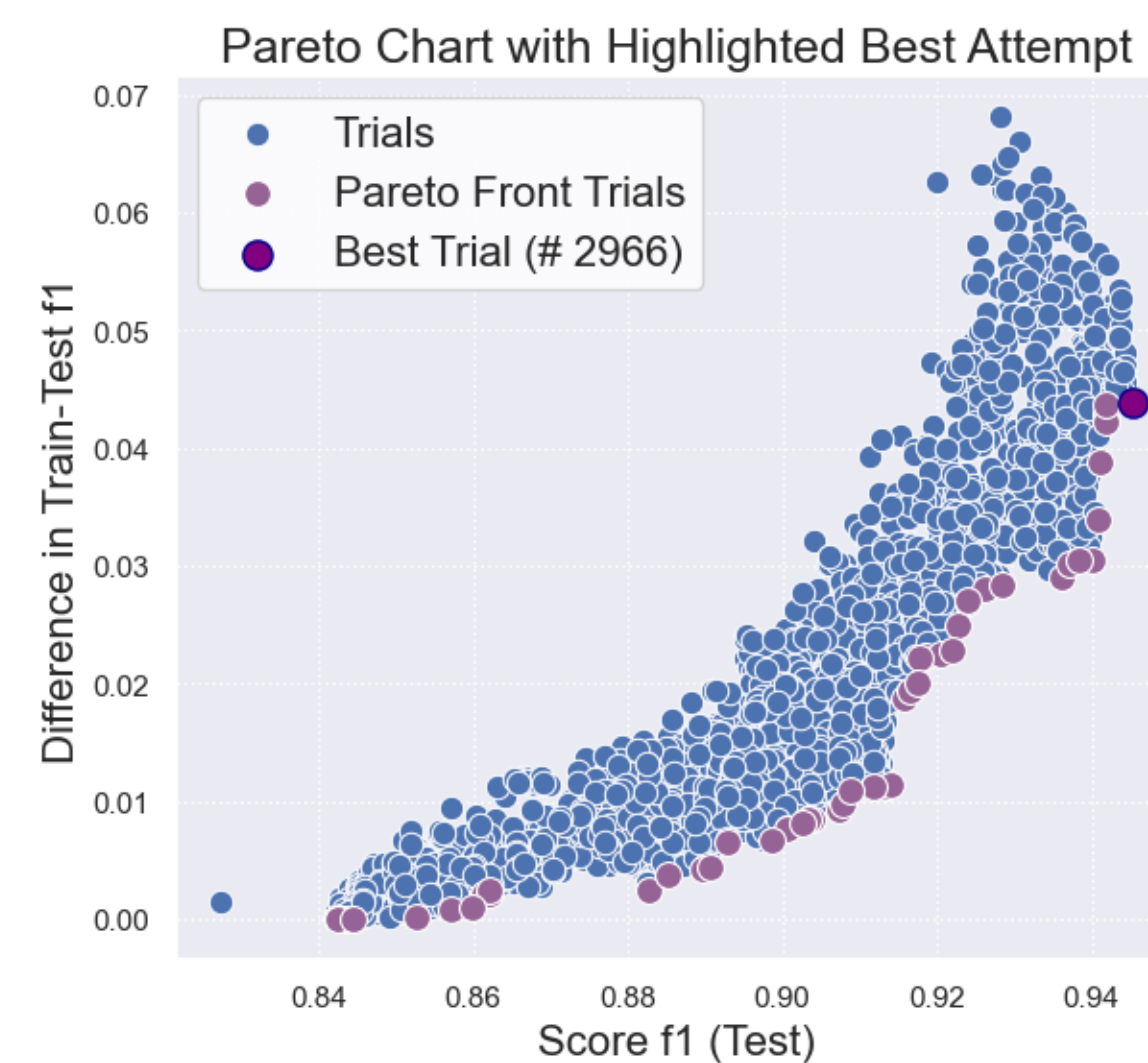
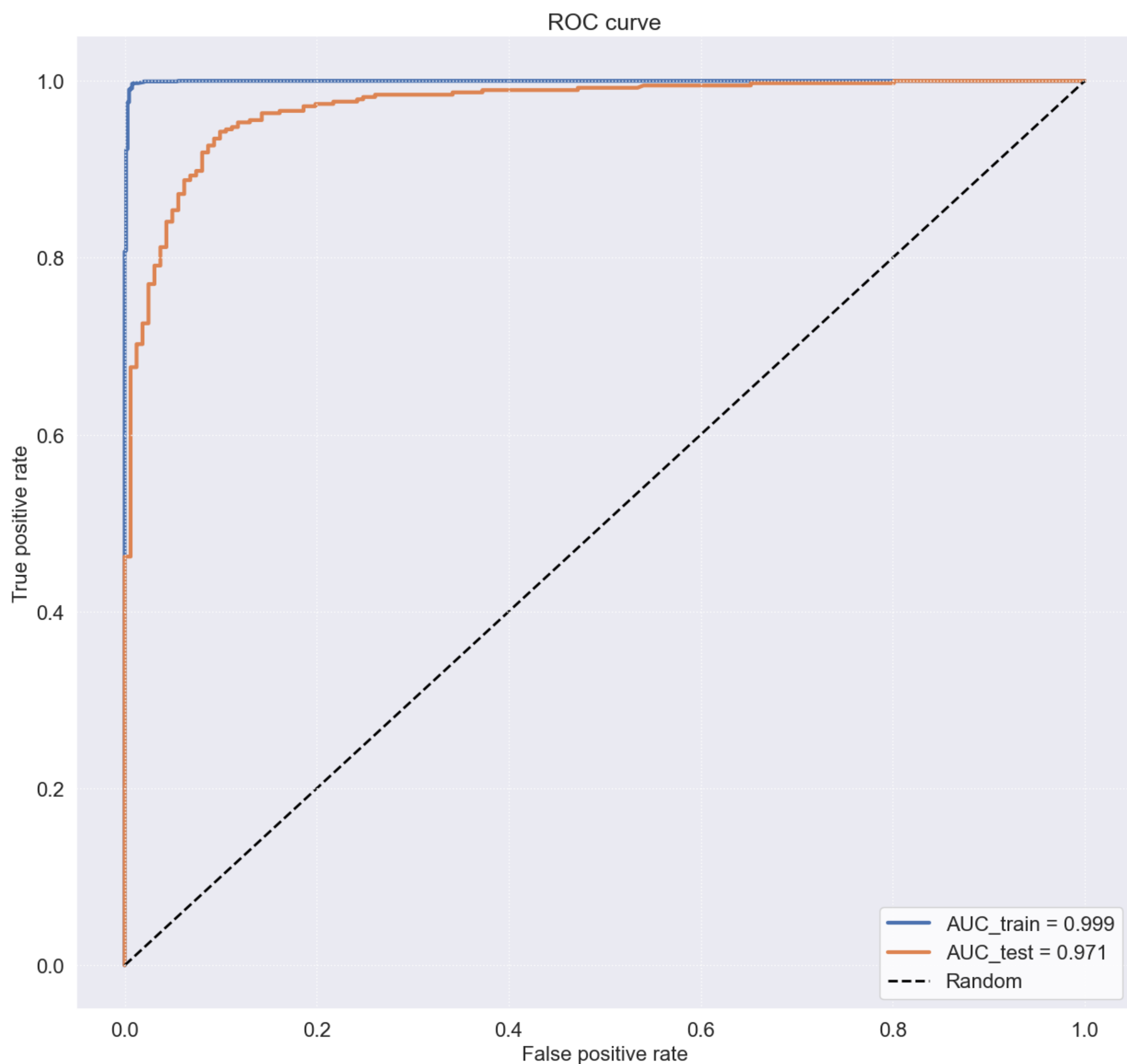
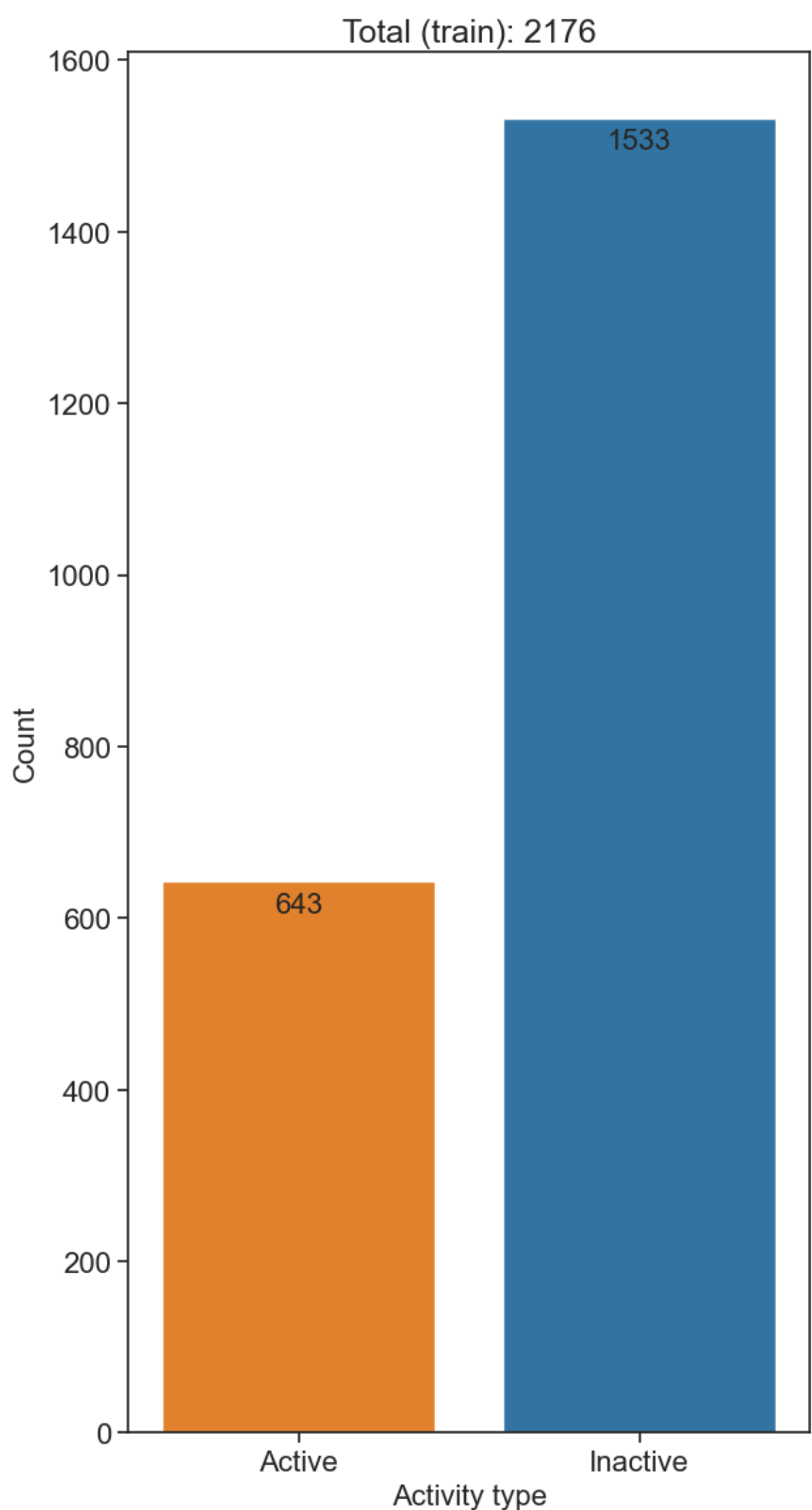
XGBoost Parameters	Value
alpha	2.914
colsample_bytree	0.9302
gamma	0.0043
lambda	0.4714
learning_rate	0.1296
max_depth	10.0
min_child_weight	2.0
n_estimators	149.0
reg_alpha	0.6297
reg_lambda	0.4995
scale_pos_weight	1.0707
subsample	0.9656



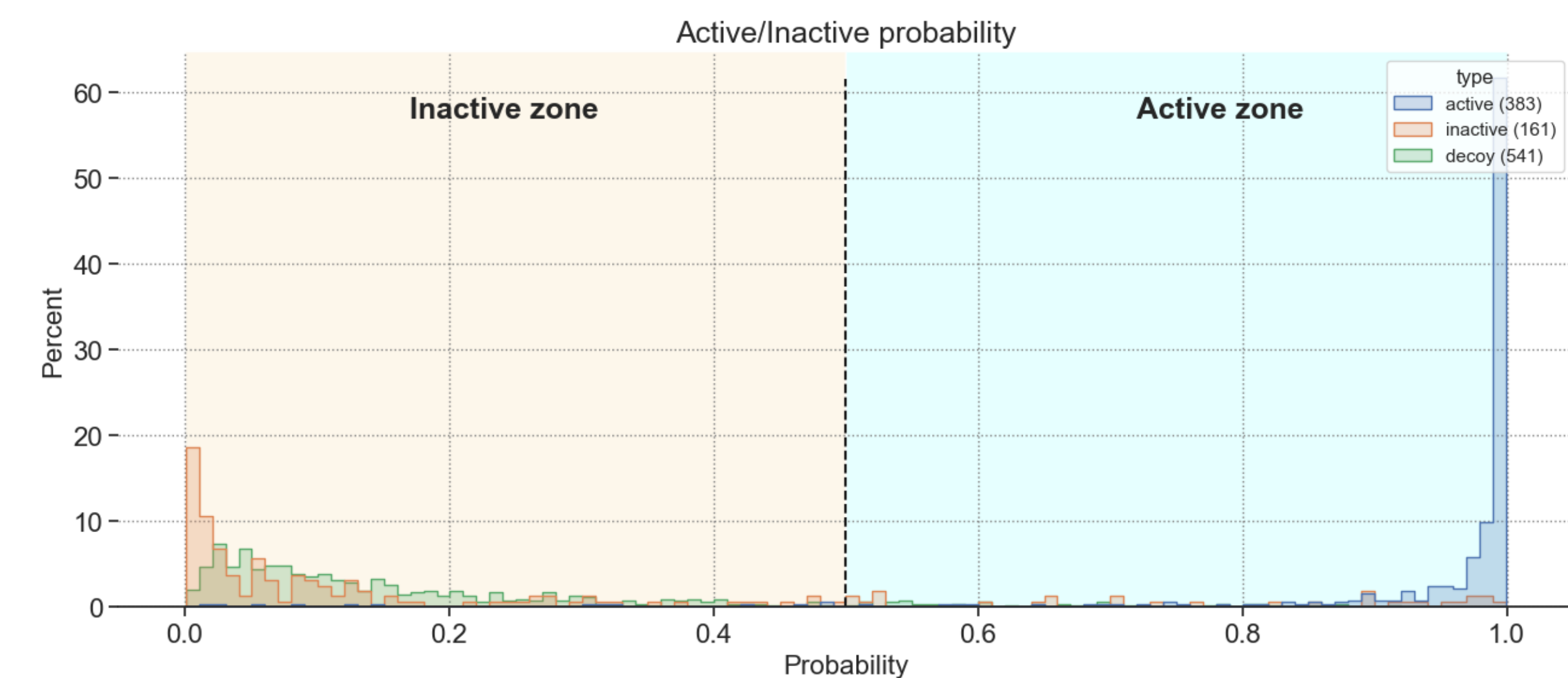
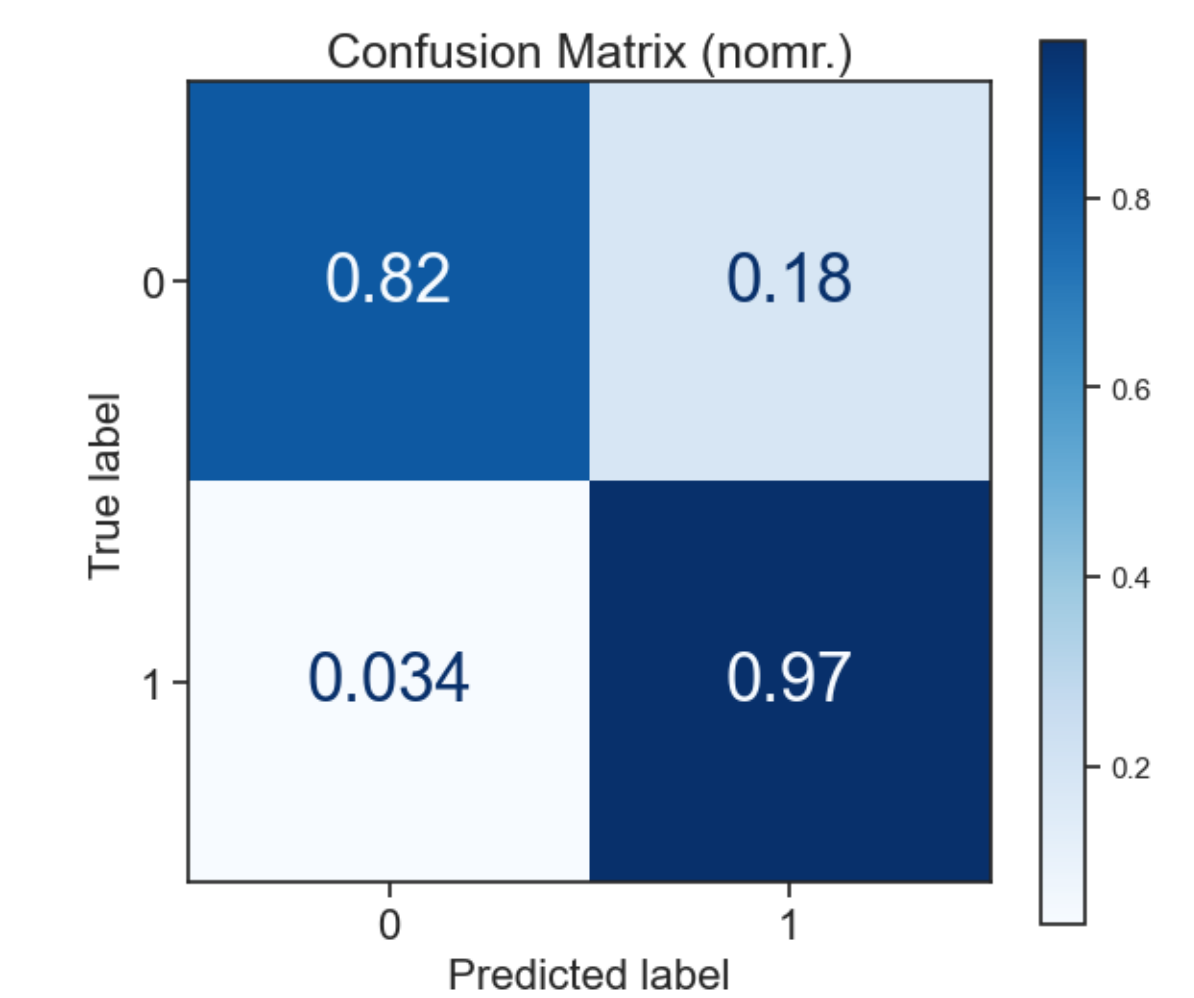
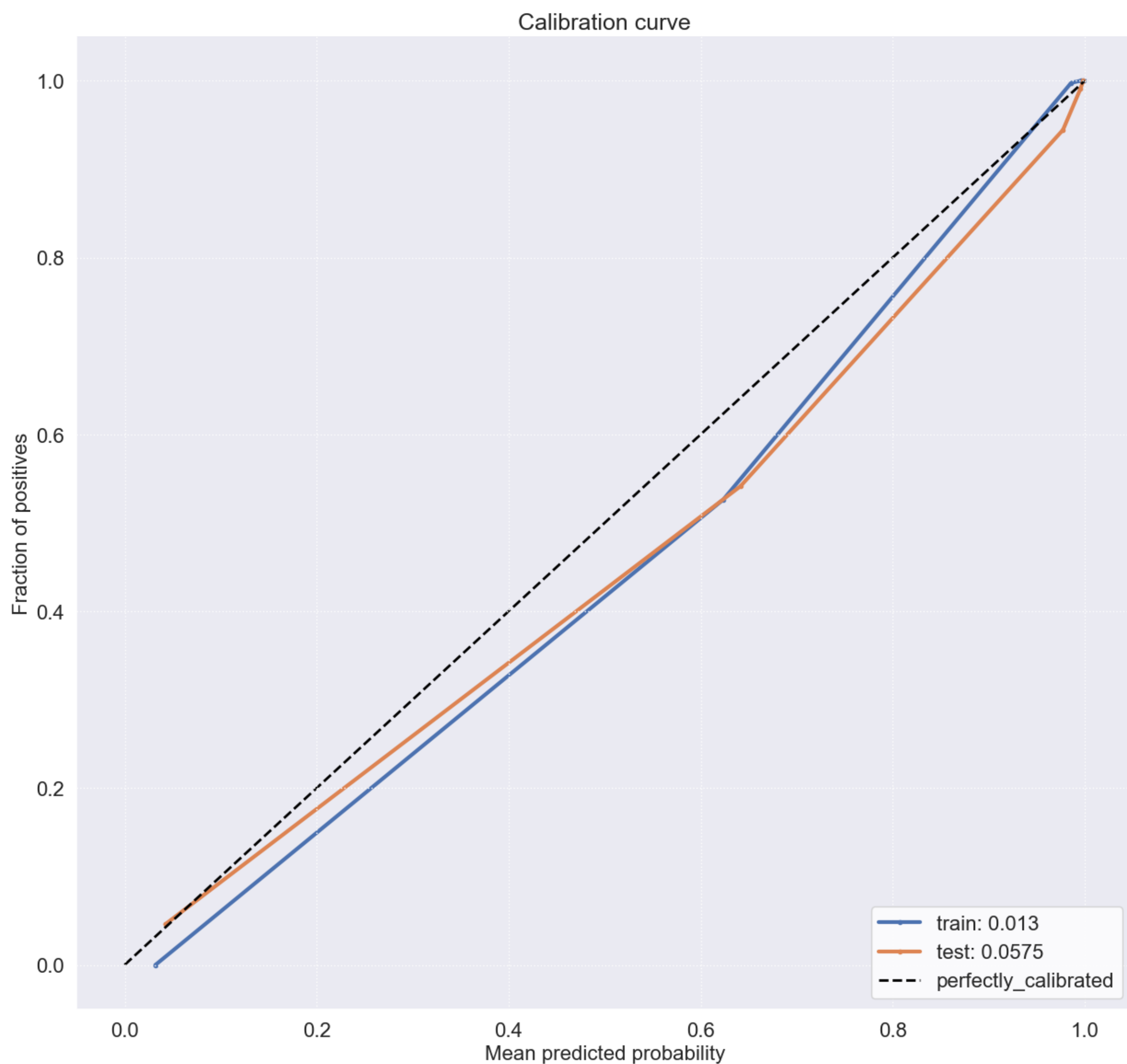
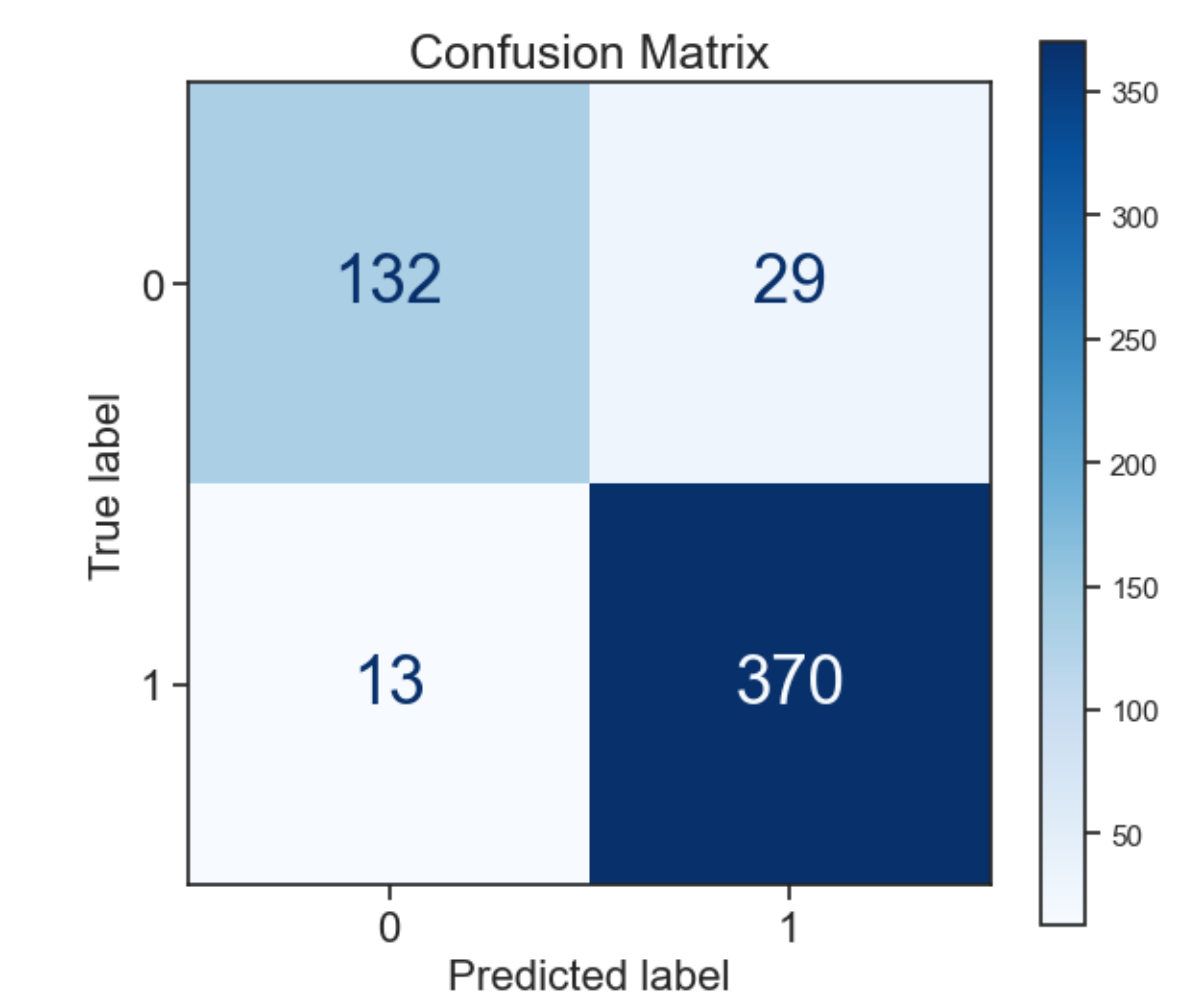
Metric	Train	Test
AUC	0.9996	0.9684
accuracy	0.9917	0.9265
balanced accuracy	0.9892	0.91
recall_(sens)	0.9954	0.9504
specificity	0.9829	0.8696
precision	0.9928	0.9455
f1_score	0.9917	0.9263



Protein: Q9UBN7 - metric: f1



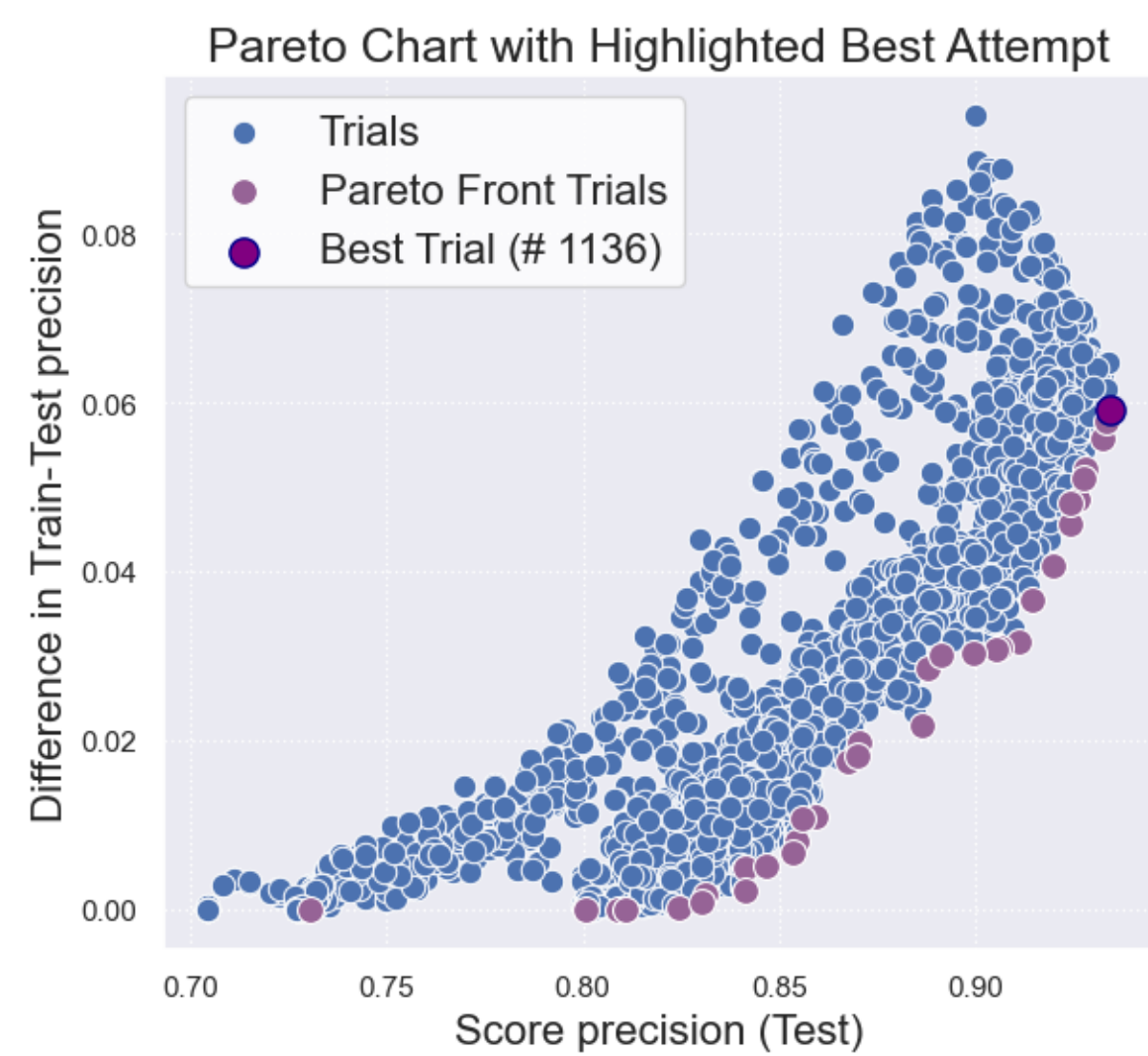
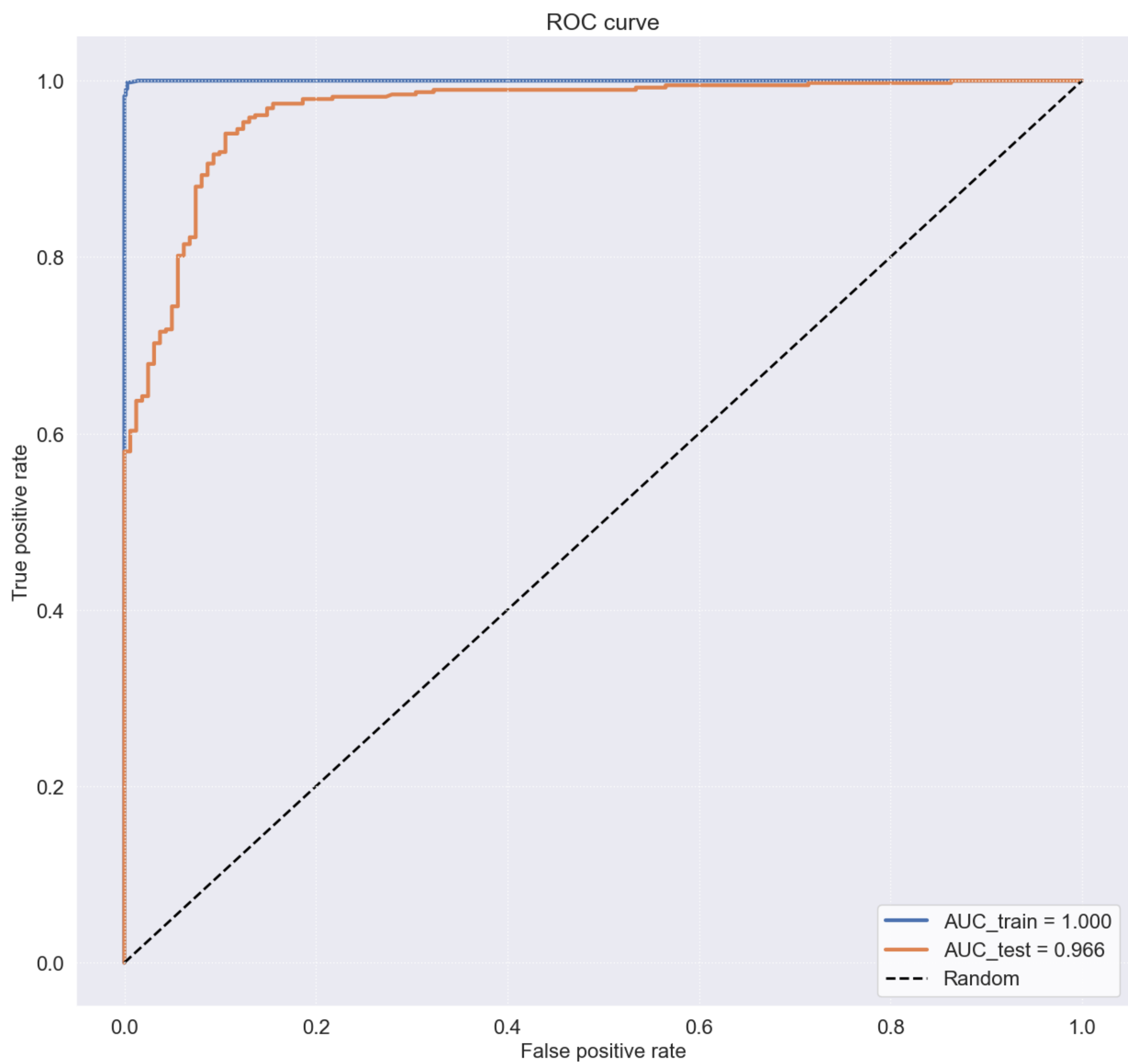
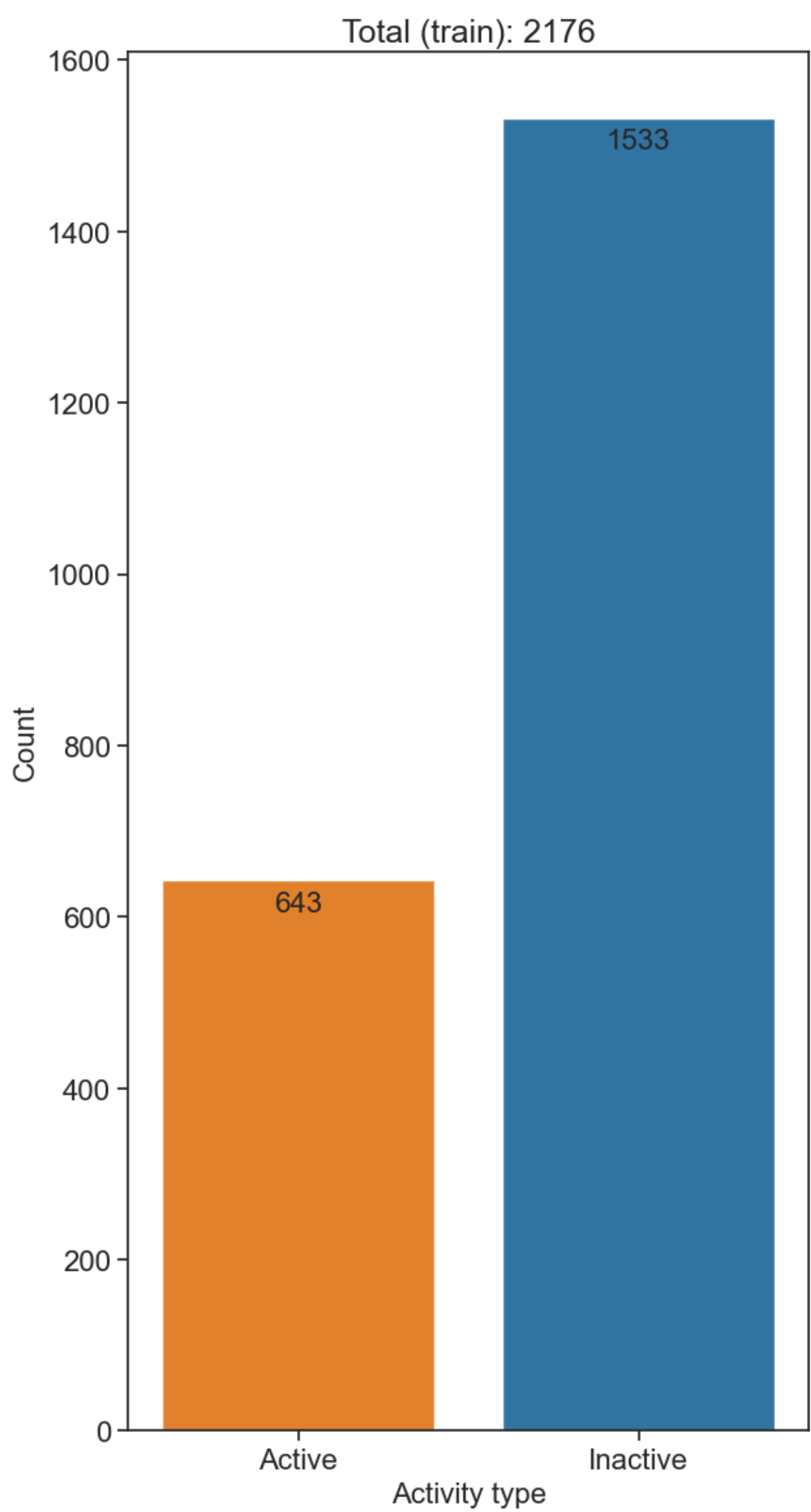
XGBoost Parameters	Value
alpha	1.324
colsample_bytree	0.6052
gamma	0.7014
lambda	4.1559
learning_rate	0.0491
max_depth	9.0
min_child_weight	1.0
n_estimators	845.0
reg_alpha	0.2428
reg_lambda	0.361
scale_pos_weight	2.8884
subsample	0.9041



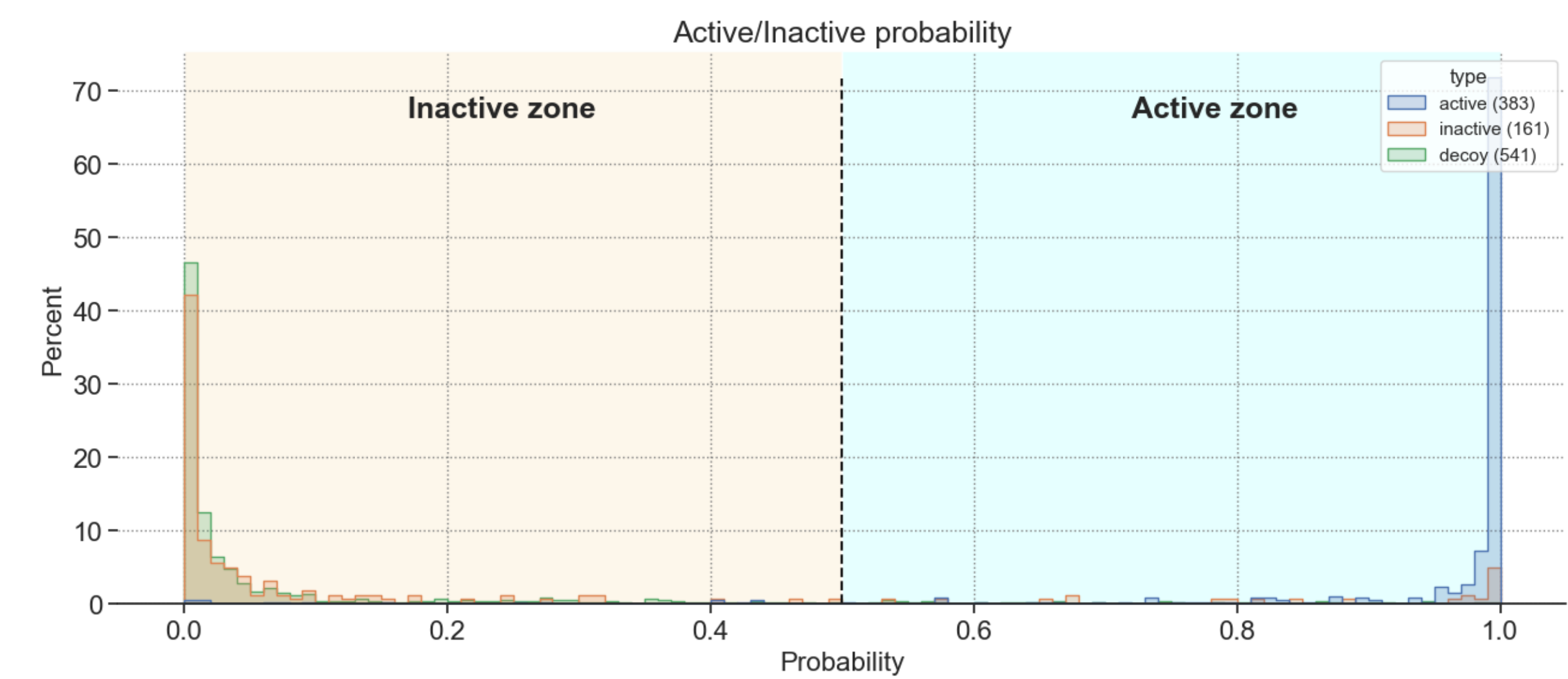
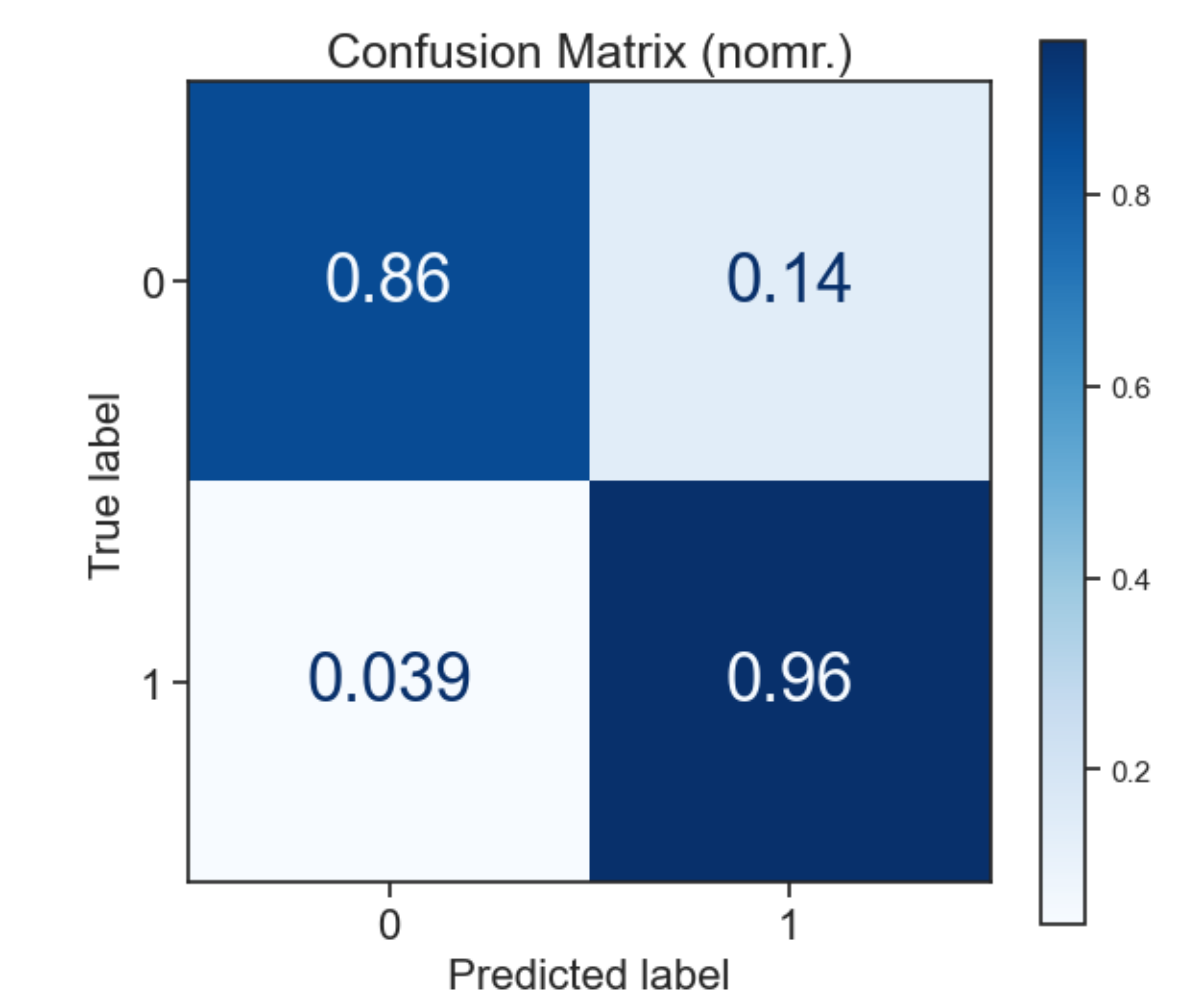
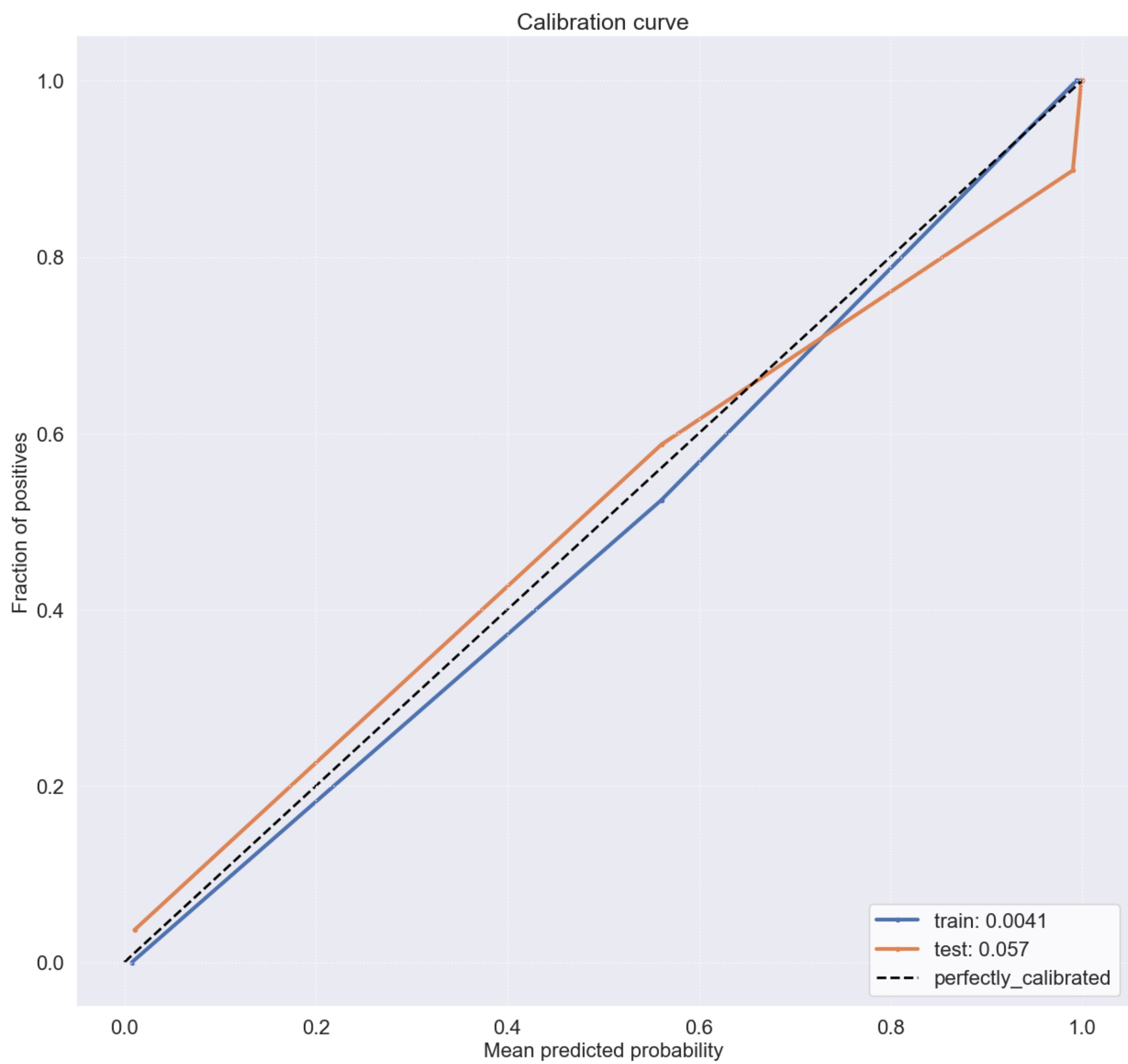
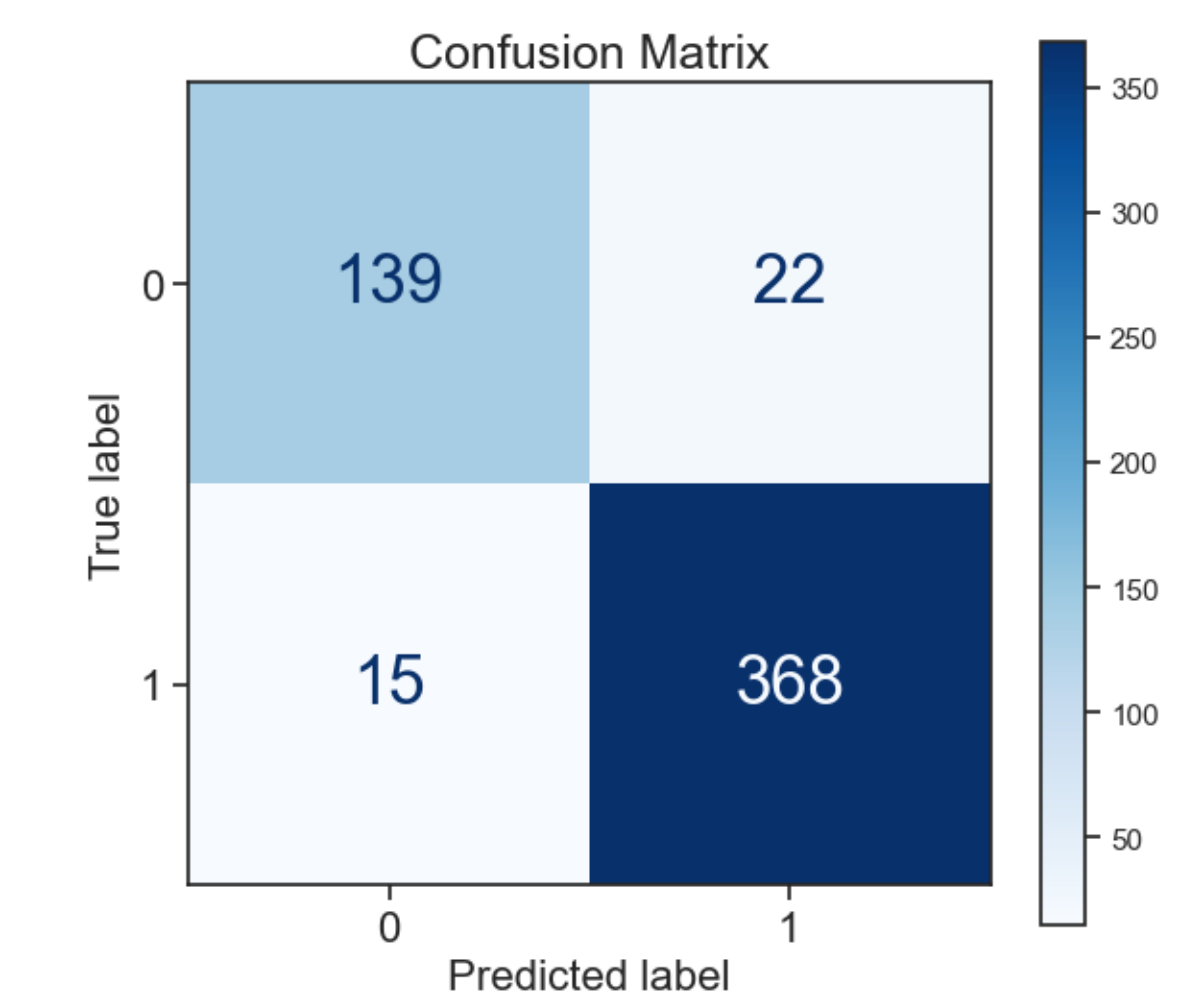
Metric	Train	Test
AUC	0.9995	0.9715
accuracy	0.9844	0.9228
balanced accuracy	0.974	0.893
recall_(sens)	0.9993	0.9661
specificity	0.9487	0.8199
precision	0.9789	0.9273
f1_score	0.9843	0.9216



Protein: Q9UBN7 - metric: precision



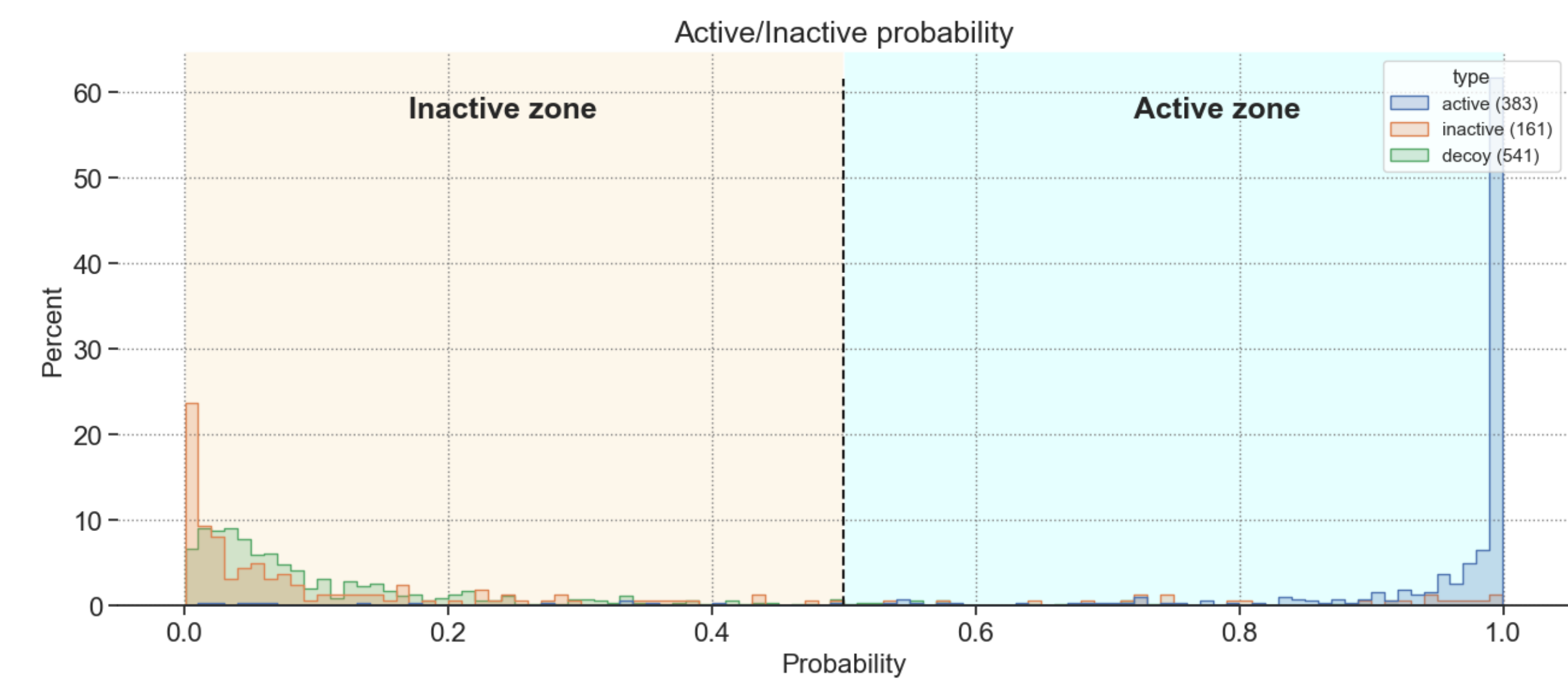
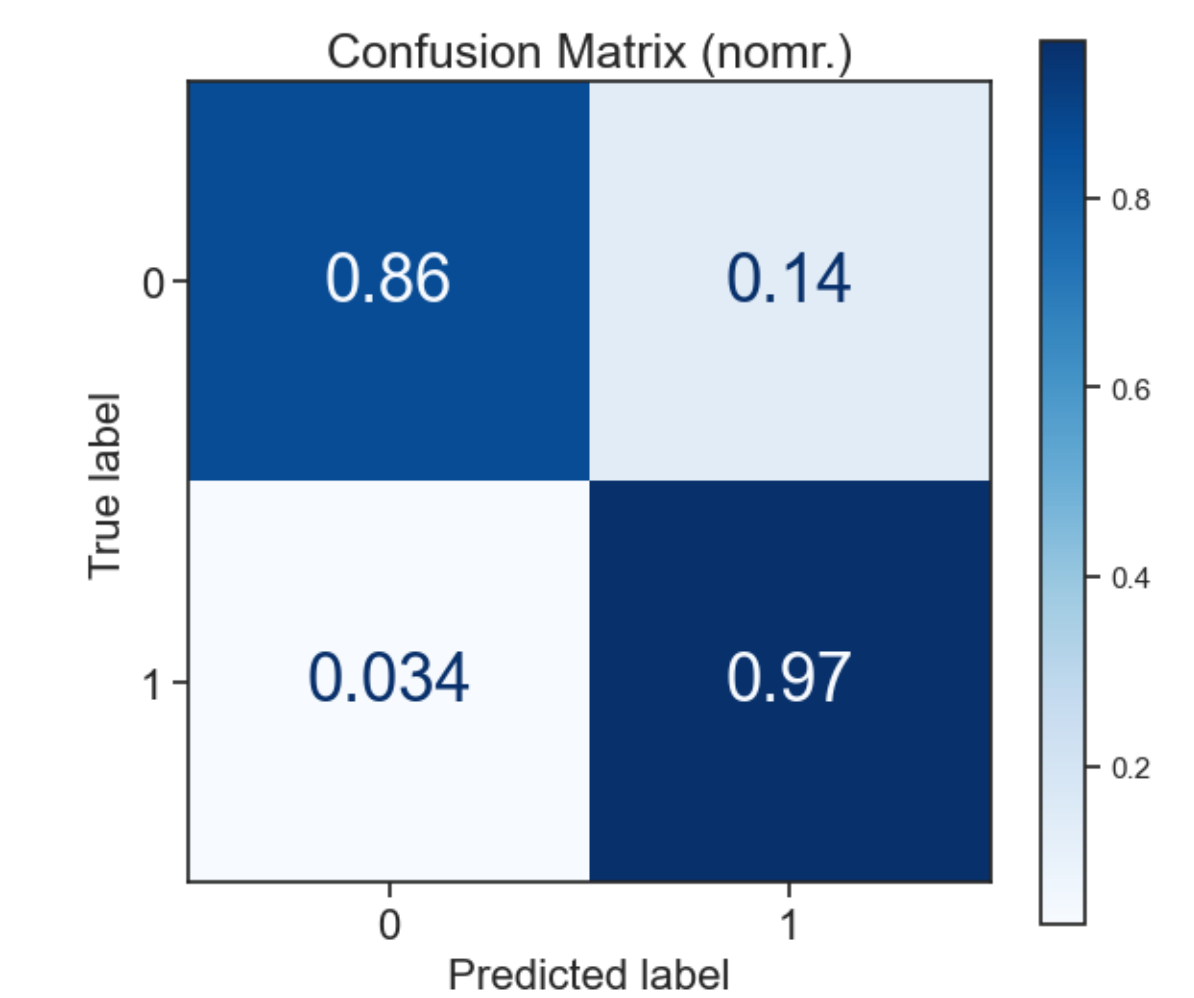
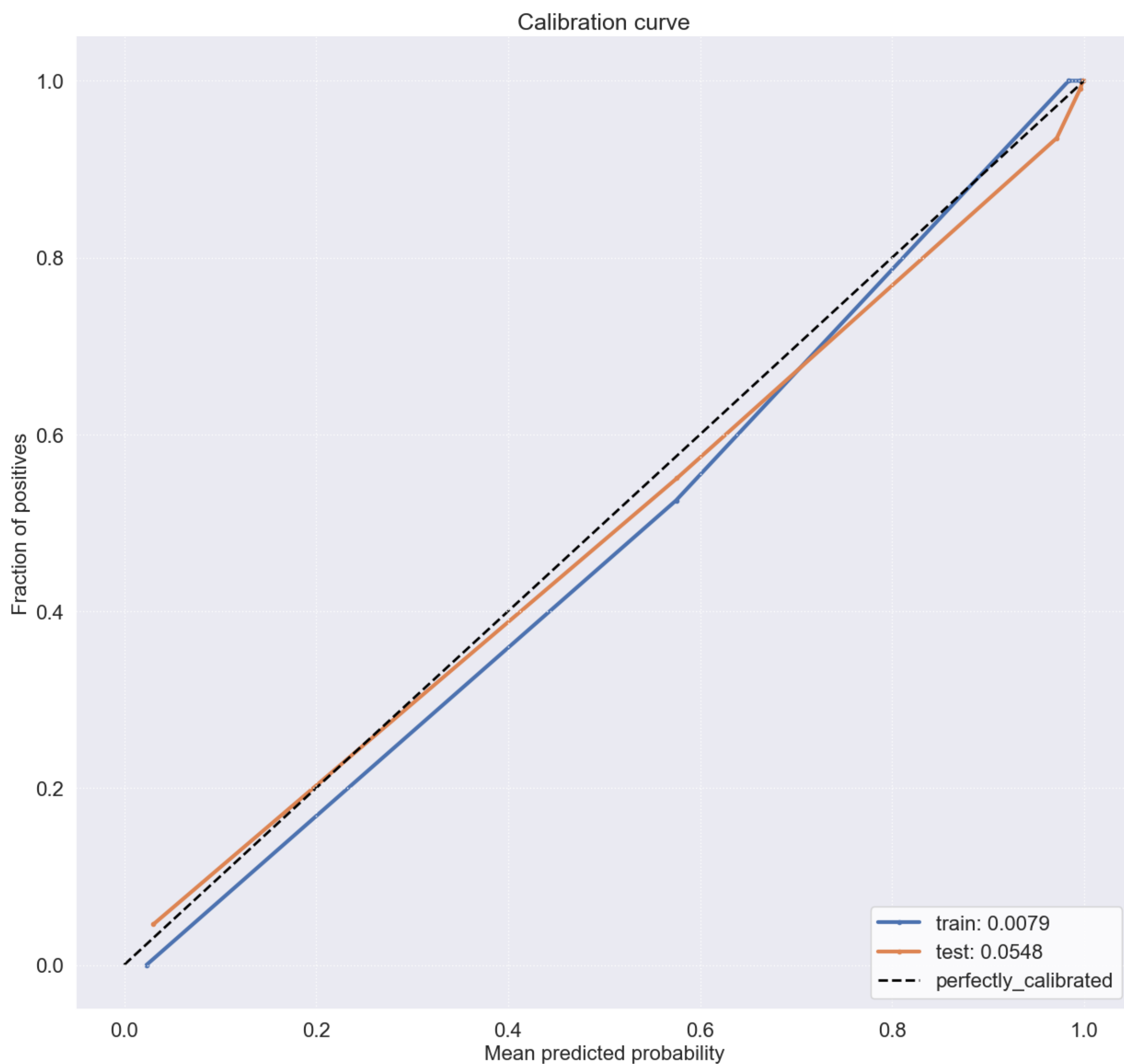
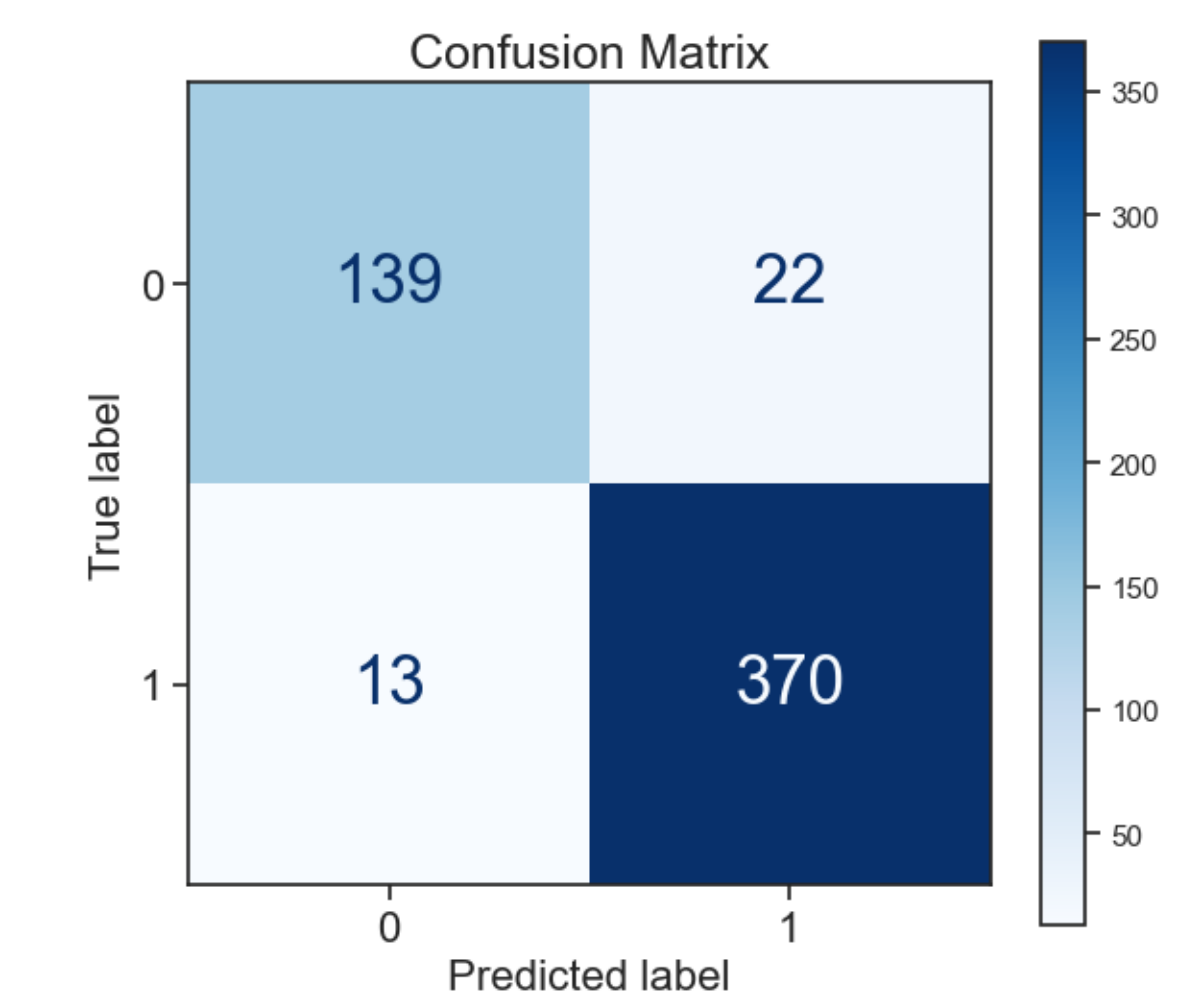
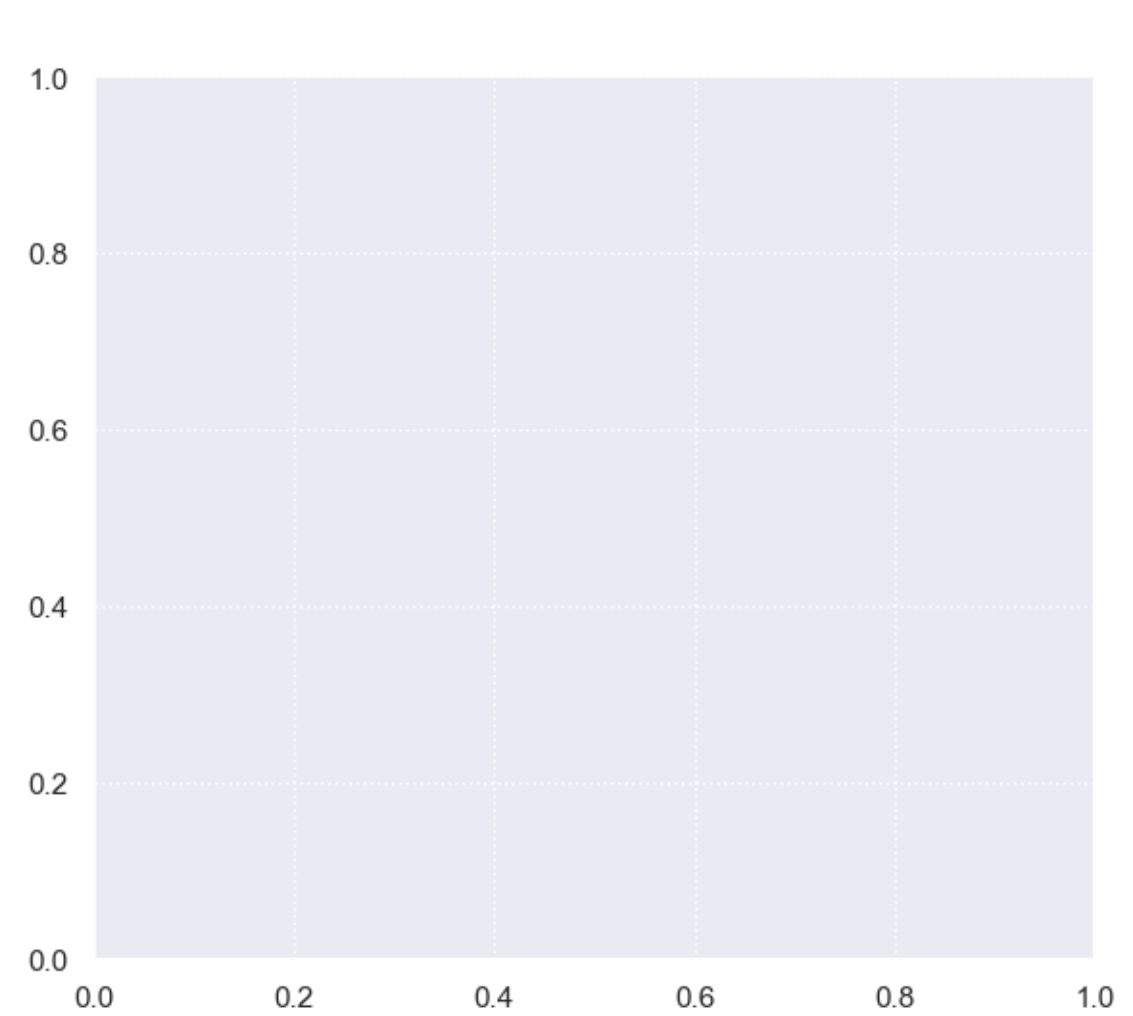
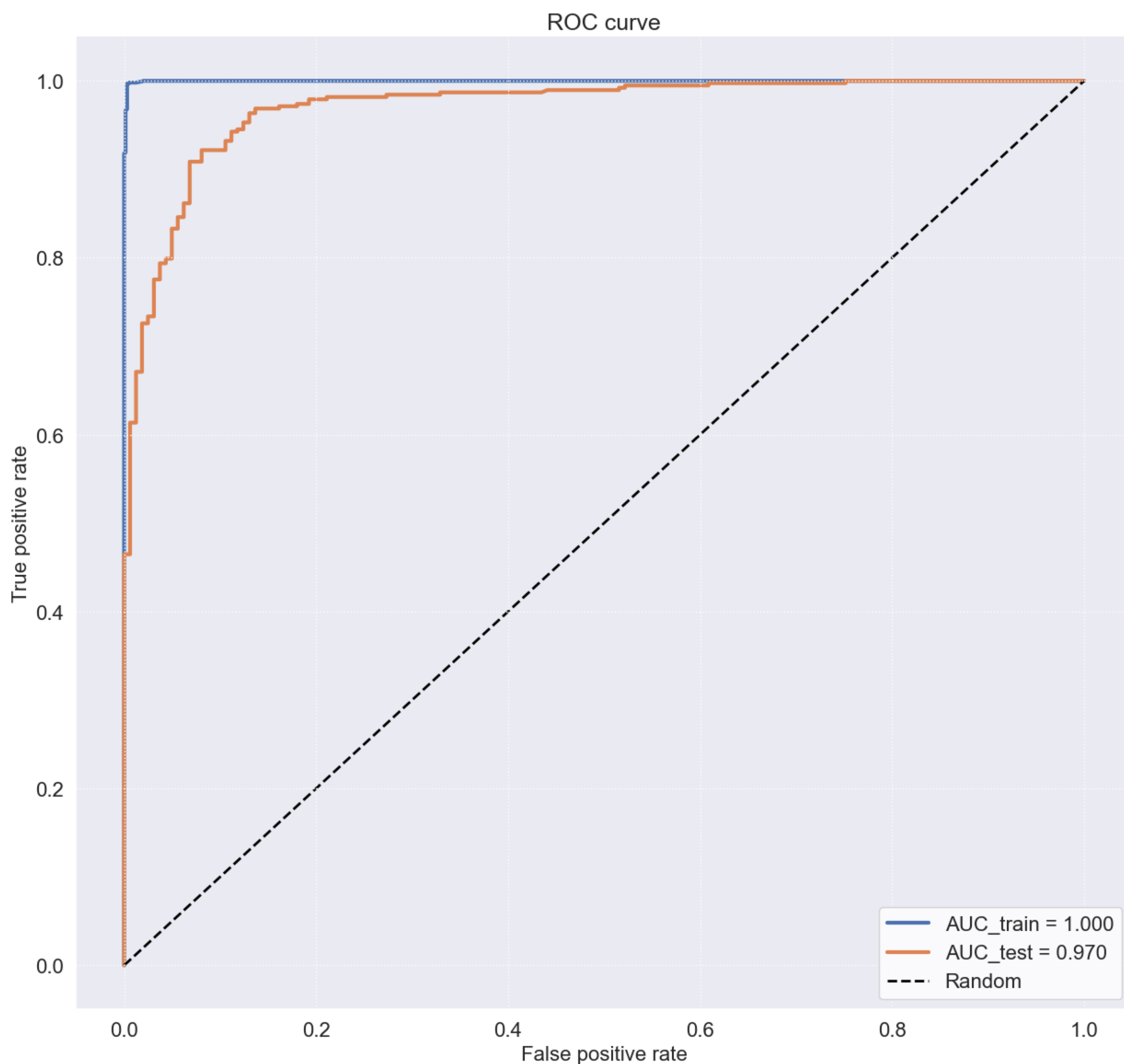
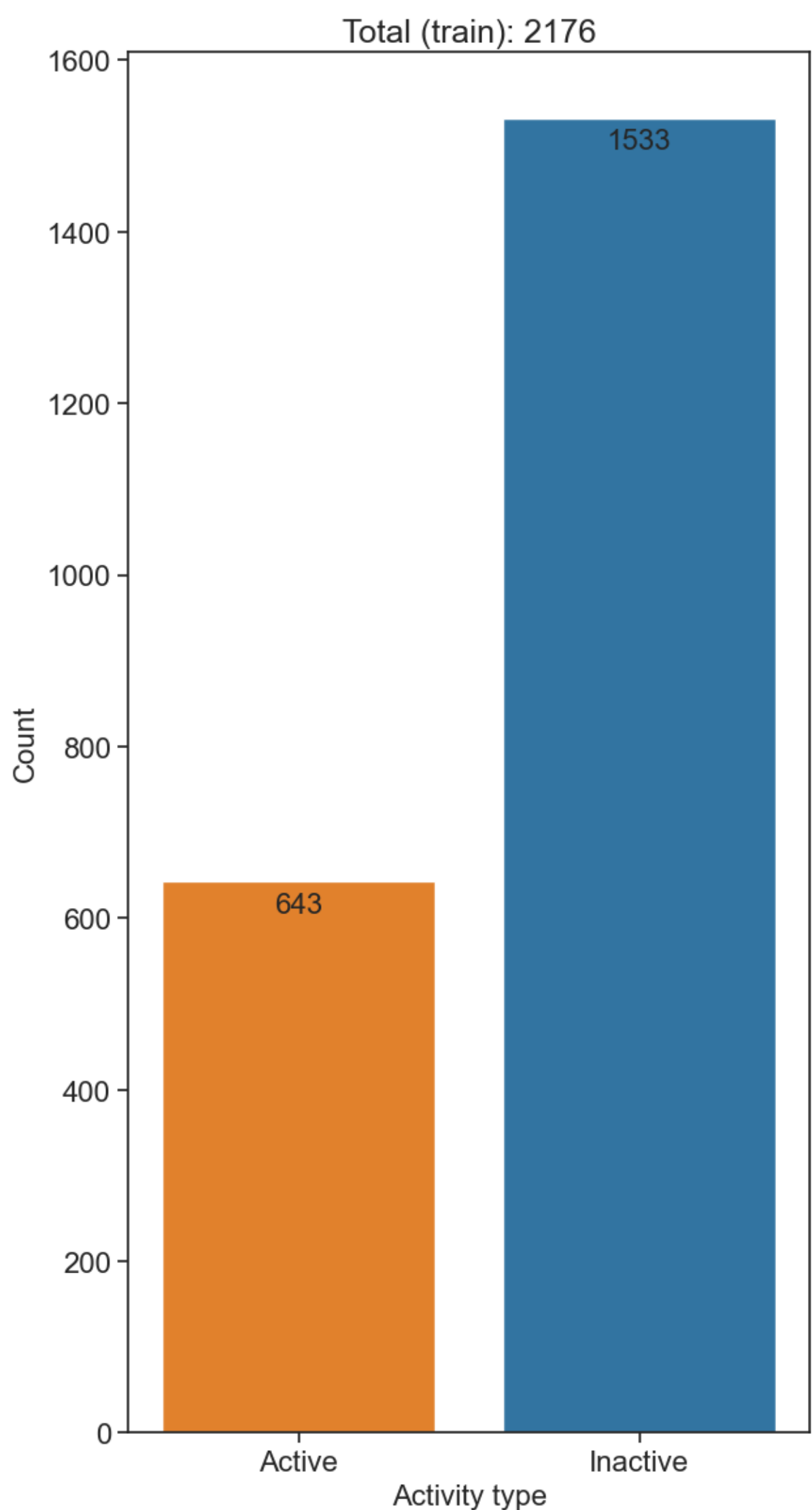
XGBoost Parameters	Value
alpha	1.7412
colsample_bytree	0.9218
gamma	0.2111
lambda	4.6234
learning_rate	0.4241
max_depth	10.0
min_child_weight	3.0
n_estimators	242.0
reg_alpha	0.0051
reg_lambda	0.0771
scale_pos_weight	2.2102
subsample	0.8909



Metric	Train	Test
AUC	0.9999	0.9658
accuracy	0.9959	0.932
balanced accuracy	0.993	0.9121
recall_(sens)	1.0	0.9608
specificity	0.986	0.8634
precision	0.9942	0.9436
f1_score	0.9959	0.9315



Protein: Q9UBN7 - metric: SoftVotingXGBoostEnsemble



Metric	Train	Test
AUC	0.9998	0.9702
accuracy	0.994	0.9357
balanced accuracy	0.9903	0.9147
recall_(sens)	0.9993	0.9661
specificity	0.9813	0.8634
precision	0.9922	0.9439
f1_score	0.994	0.9351