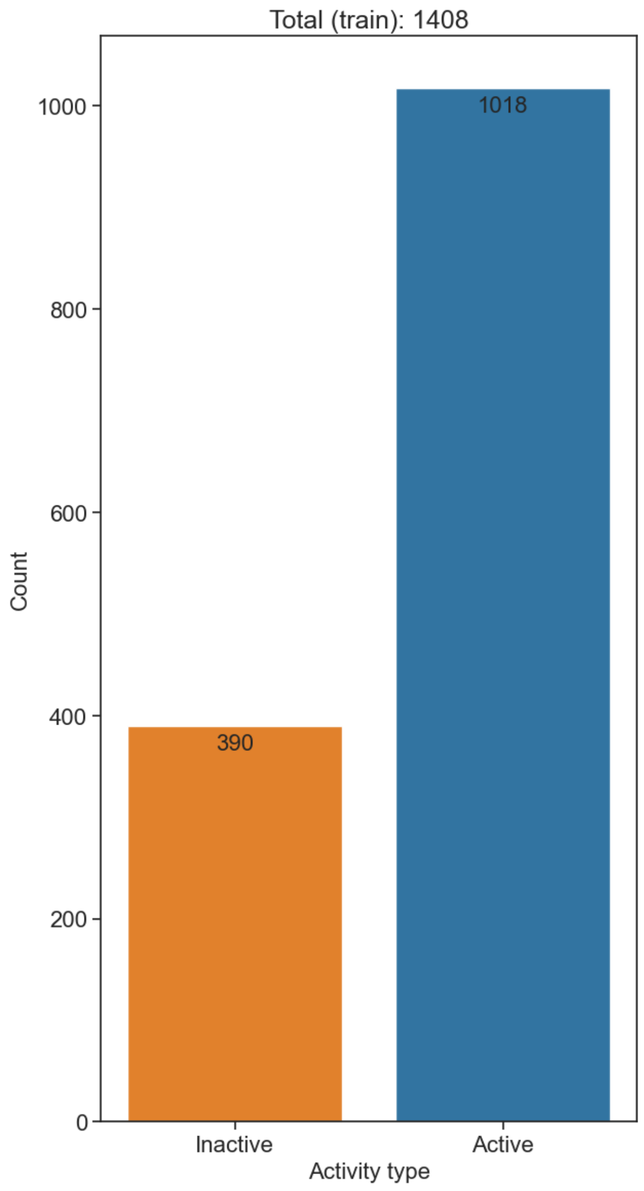
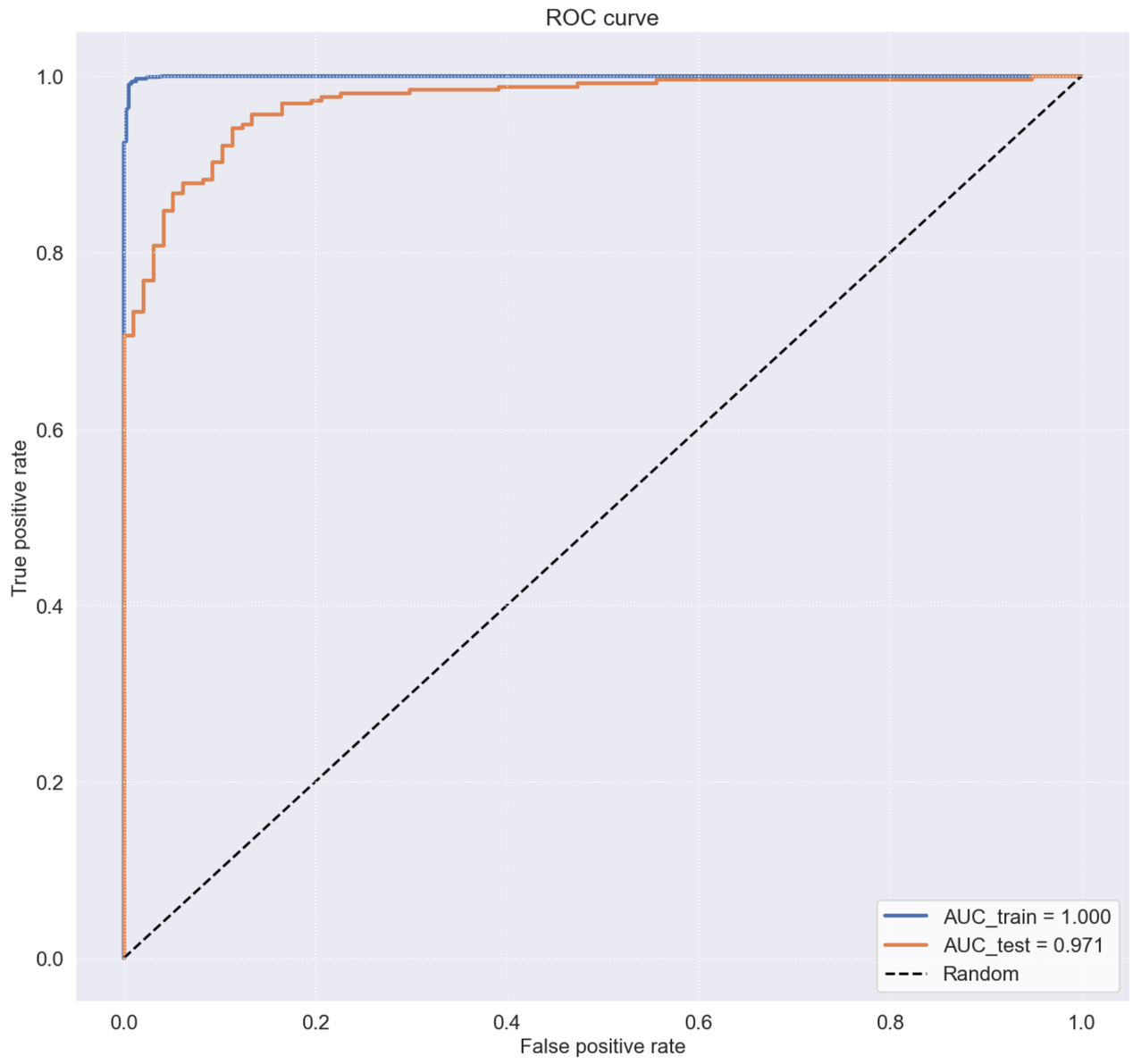
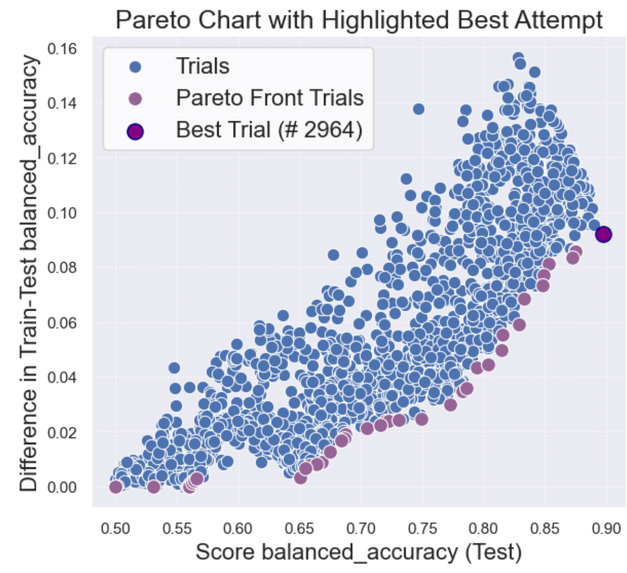
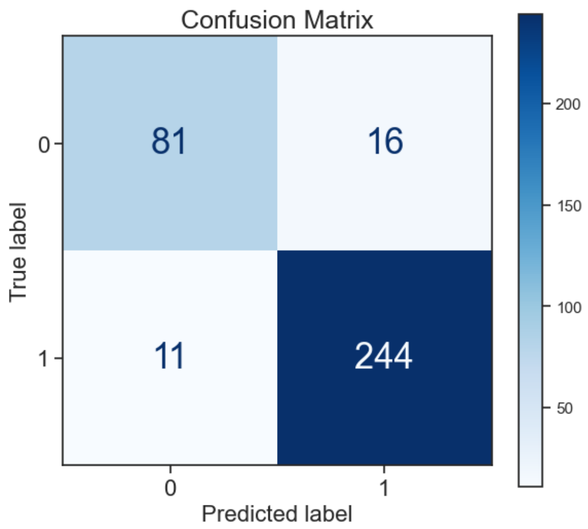
Protein: P20309 - metric: balanced_accuracy

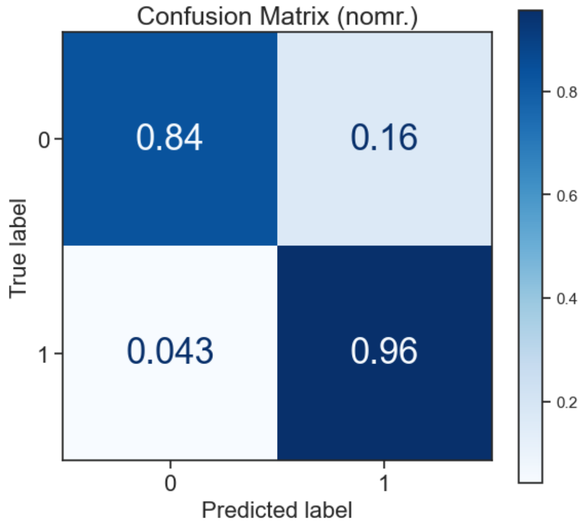


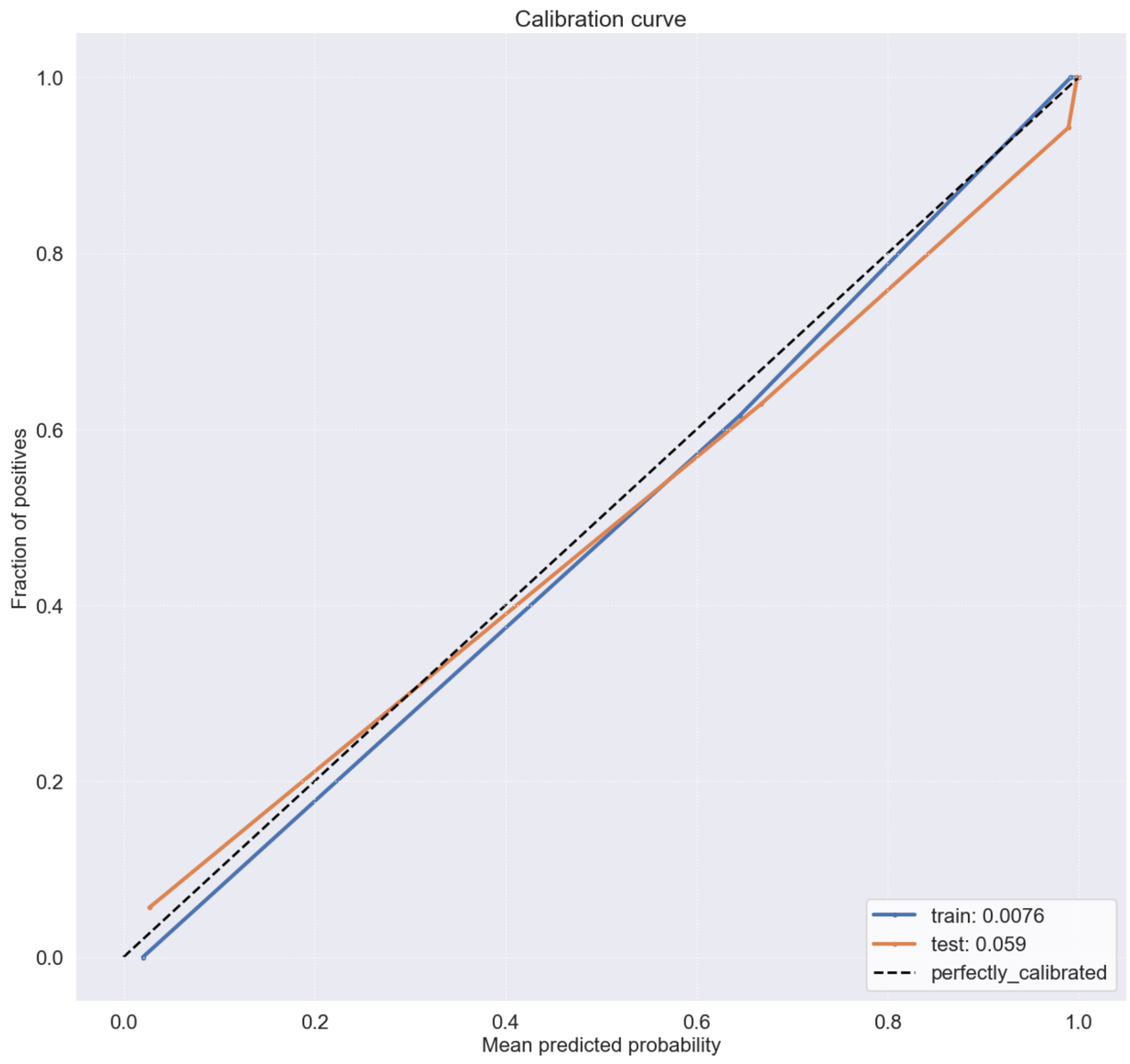


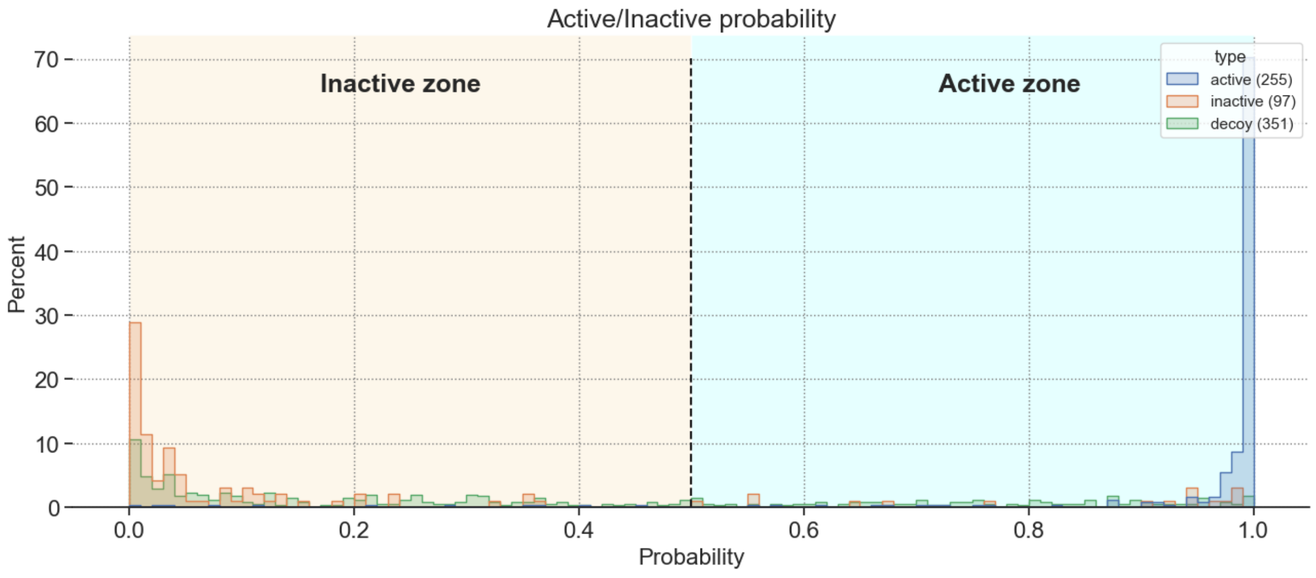


XGBoost Parameters	Value
alpha	3.9115
colsample_bytree	0.6372
gamma	0.248
lambda	3.6878
learning_rate	0.3996
max_depth	5.0
min_child_weight	1.0
n_estimators	324.0
reg_alpha	0.1848
reg_lambda	0.252
scale_pos_weight	1.6569
subsample	0.9733



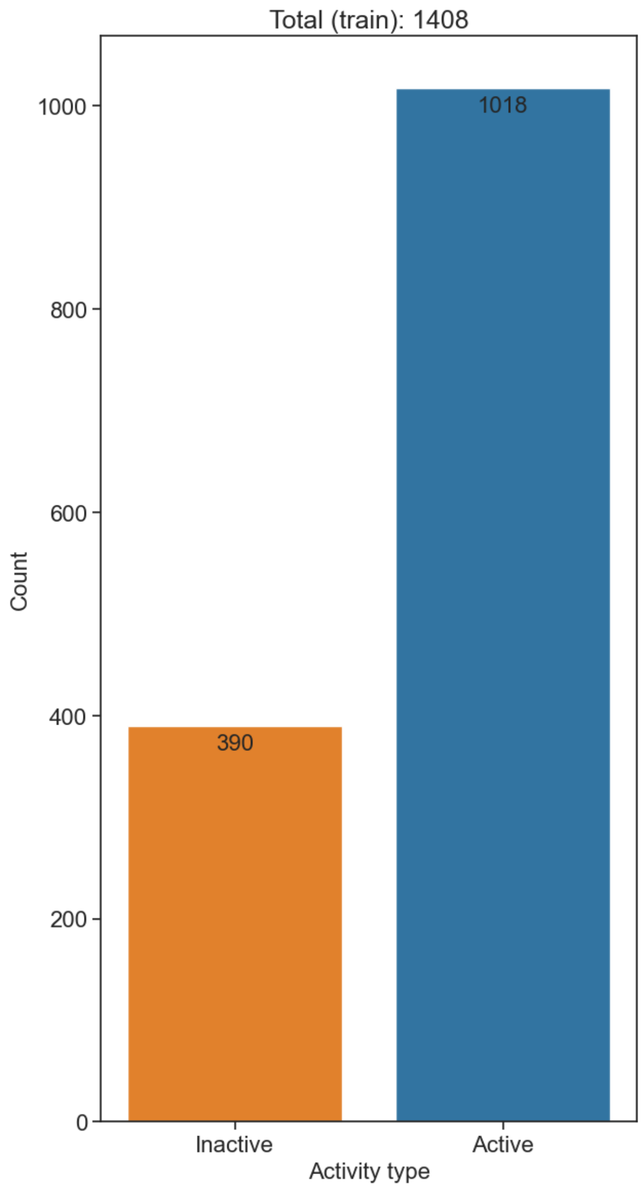


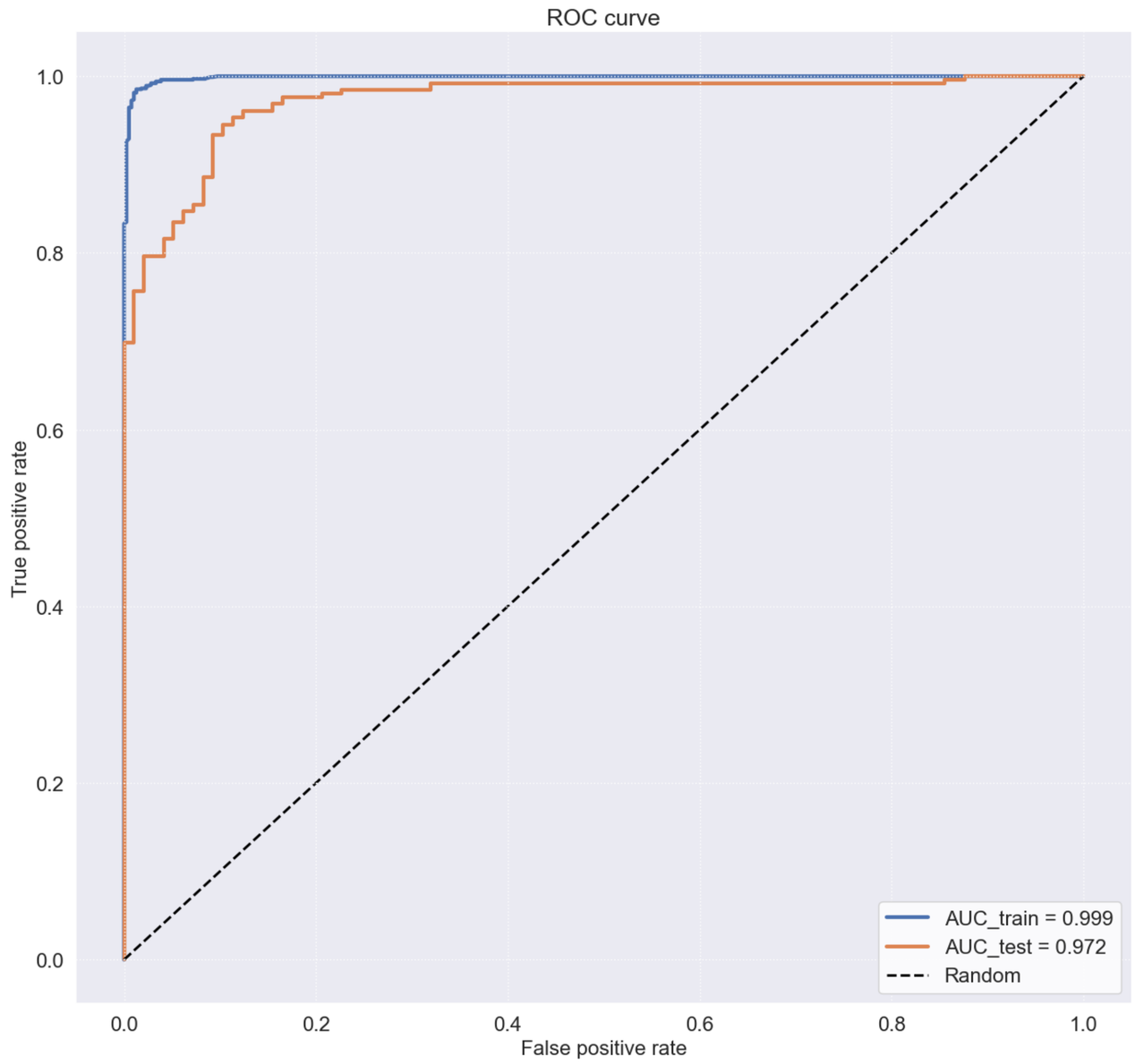


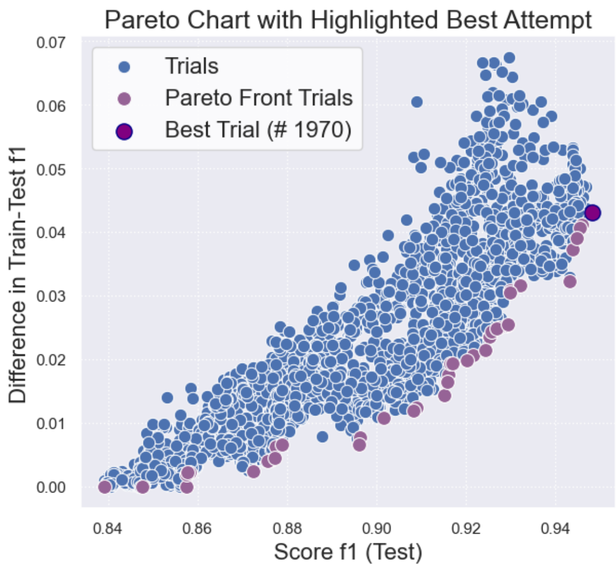


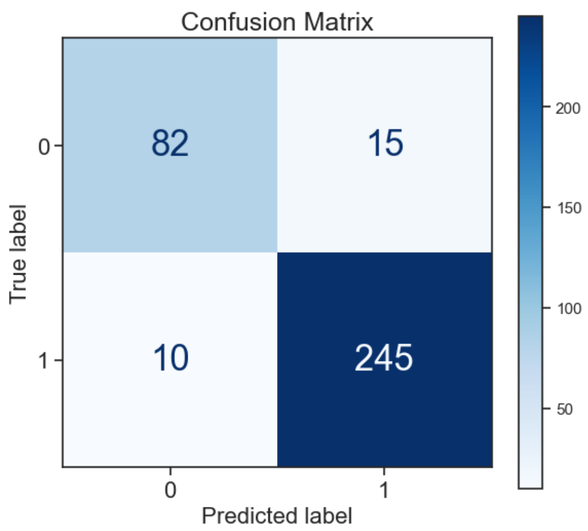
Metric	Train	Test
AUC	0.9996	0.9711
accuracy	0.9922	0.9233
balanced accuracy	0.9867	0.896
recall_(sens)	0.999	0.9569
specificity	0.9744	0.8351
precision	0.9903	0.9385
f1_score	0.9922	0.9227

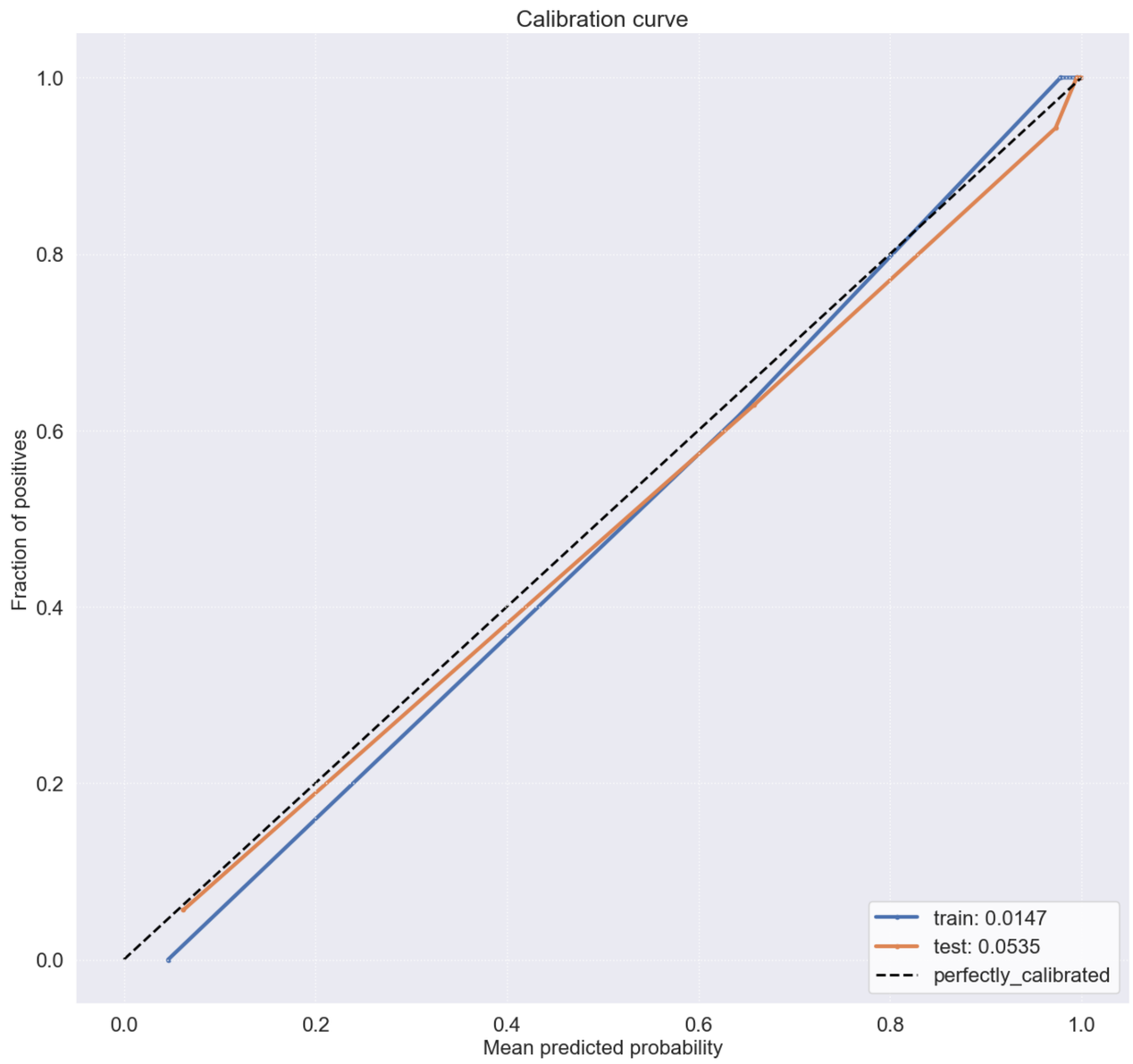
Protein: P20309 - metric: f1

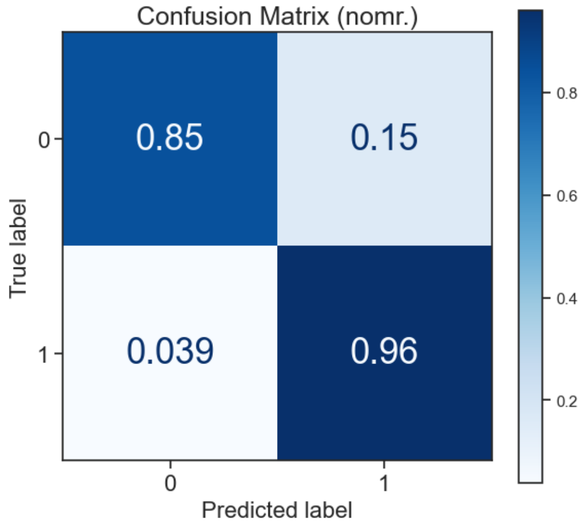




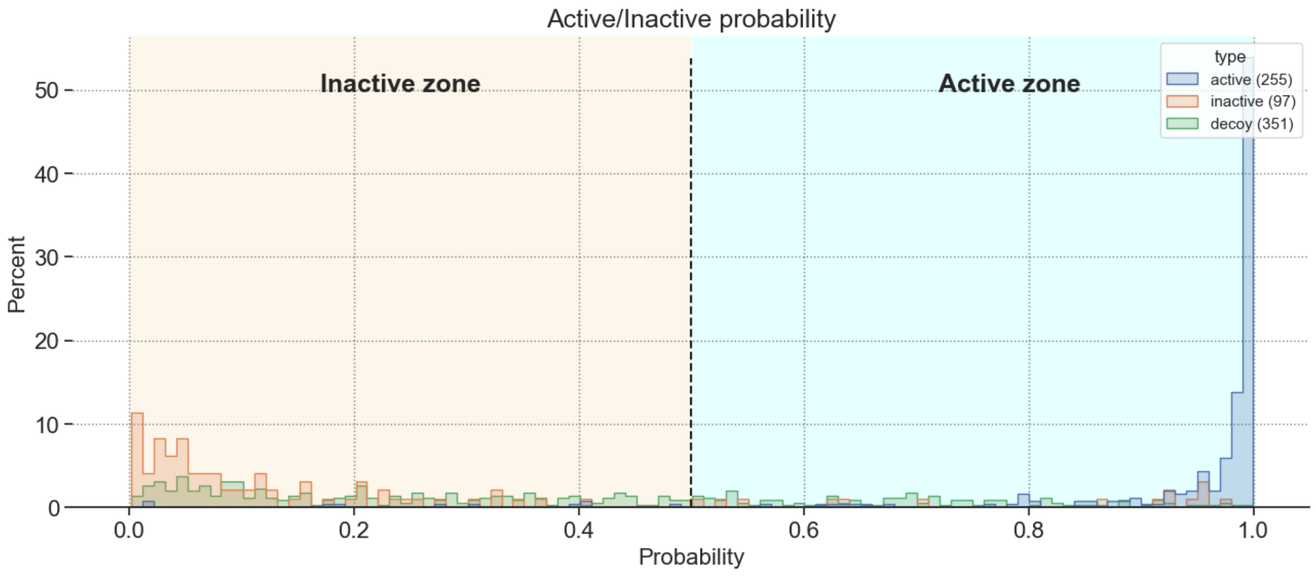






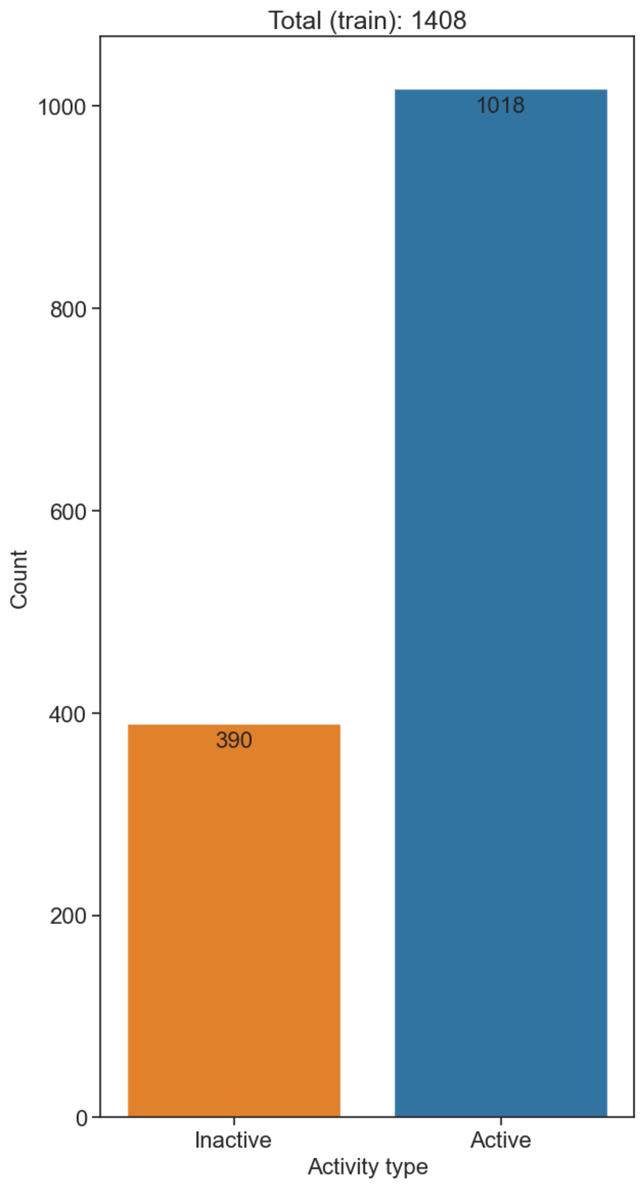


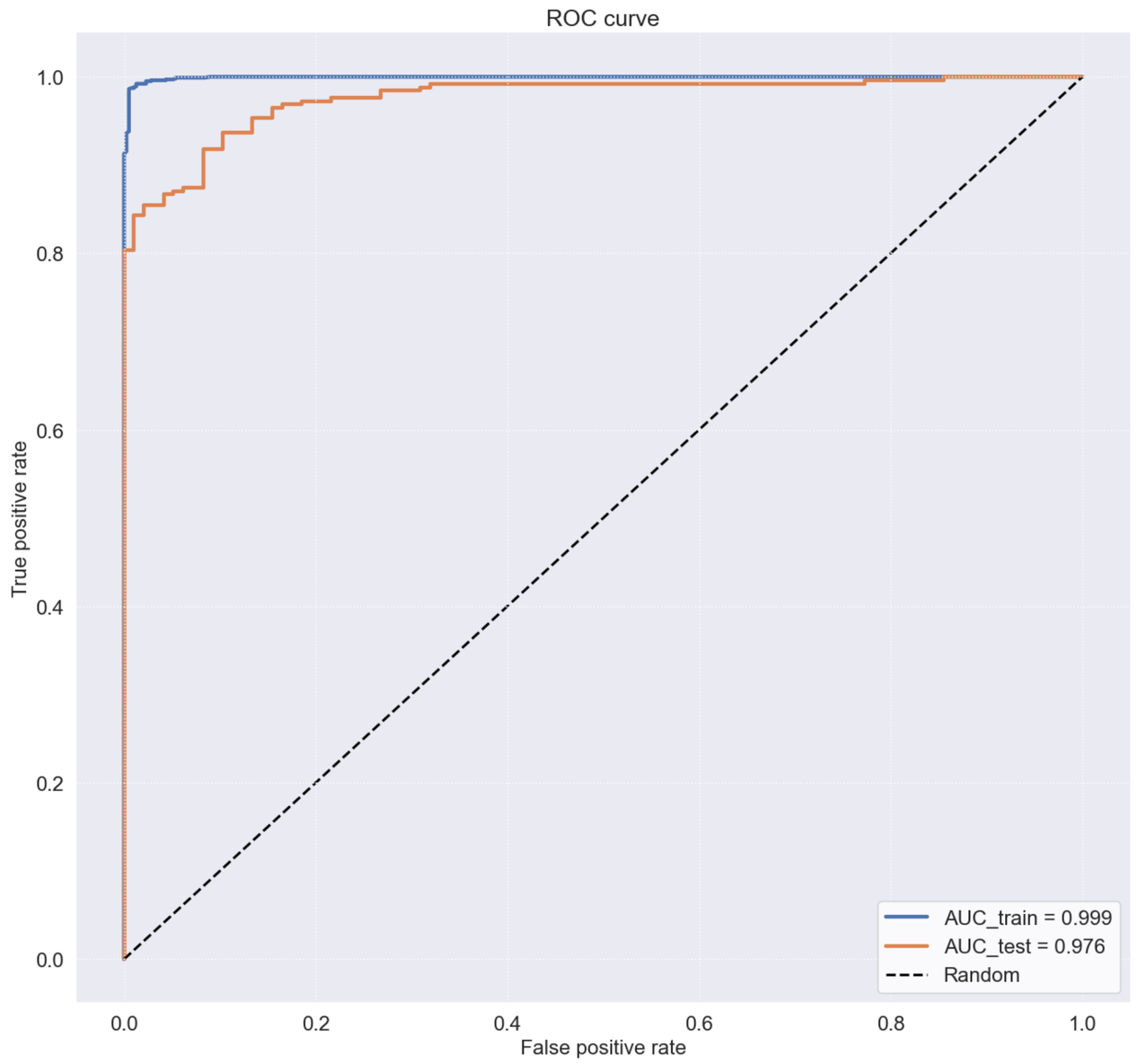
XGBoost Parameters	Value
alpha	4.142
colsample_bytree	0.5632
gamma	0.2078
lambda	0.4349
learning_rate	0.05
max_depth	5.0
min_child_weight	1.0
n_estimators	578.0
reg_alpha	0.0692
reg_lambda	0.6113
scale_pos_weight	1.3826
subsample	0.9081

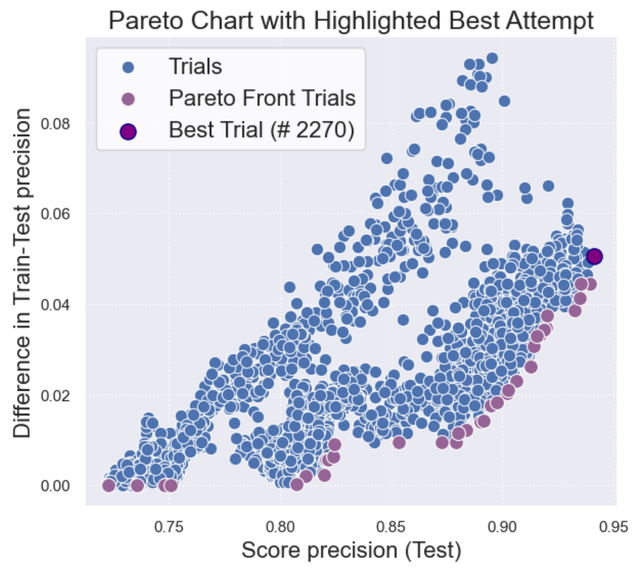


Metric	Train	Test
AUC	0.9987	0.9719
accuracy	0.9858	0.929
balanced accuracy	0.9791	0.9031
recall_(sens)	0.9941	0.9608
specificity	0.9641	0.8454
precision	0.9864	0.9423
f1_score	0.9857	0.9284

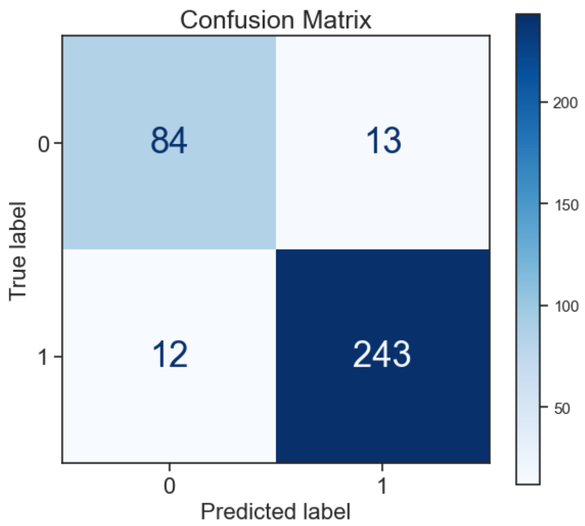
Protein: P20309 - metric: precision

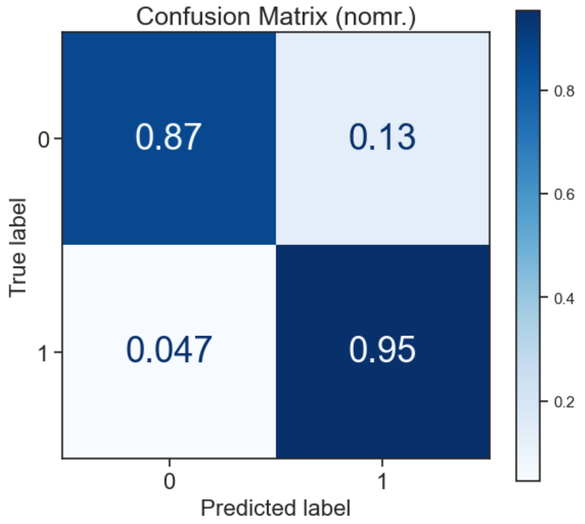


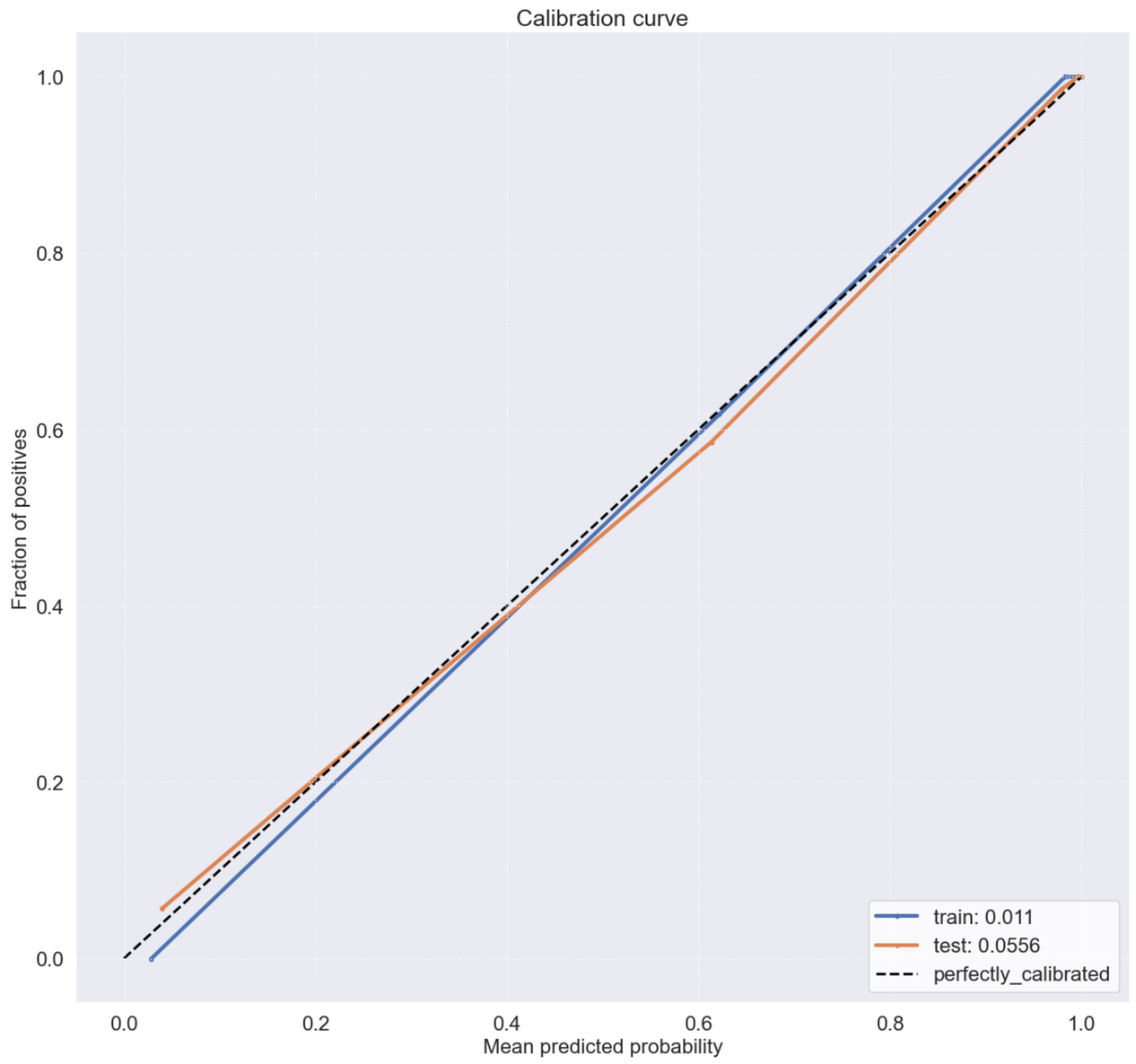


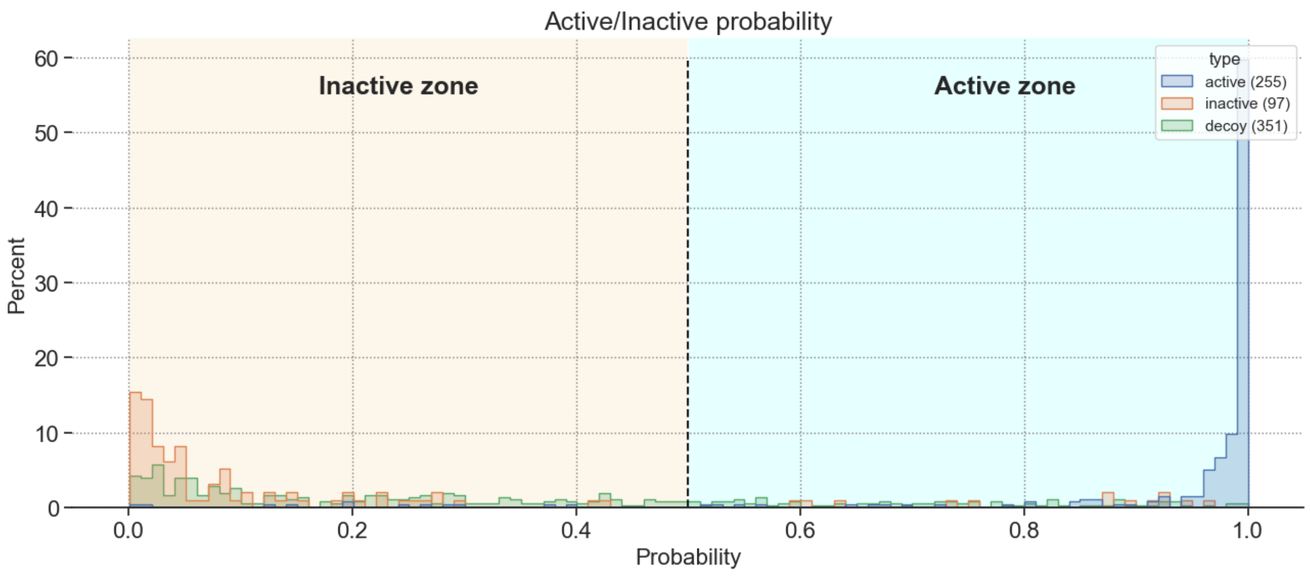


XGBoost Parameters	Value
alpha	1.6289
colsample_bytree	0.6236
gamma	0.4449
lambda	1.2536
learning_rate	0.1007
max_depth	6.0
min_child_weight	1.0
n_estimators	356.0
reg_alpha	0.2072
reg_lambda	0.2327
scale_pos_weight	1.1623
subsample	0.7283



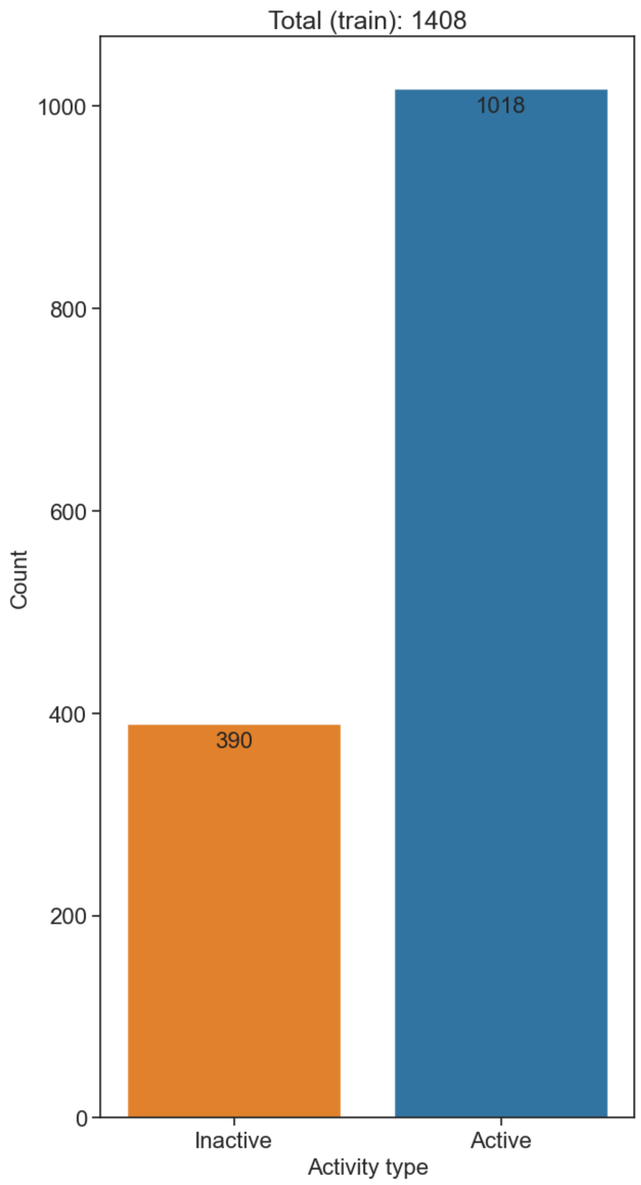


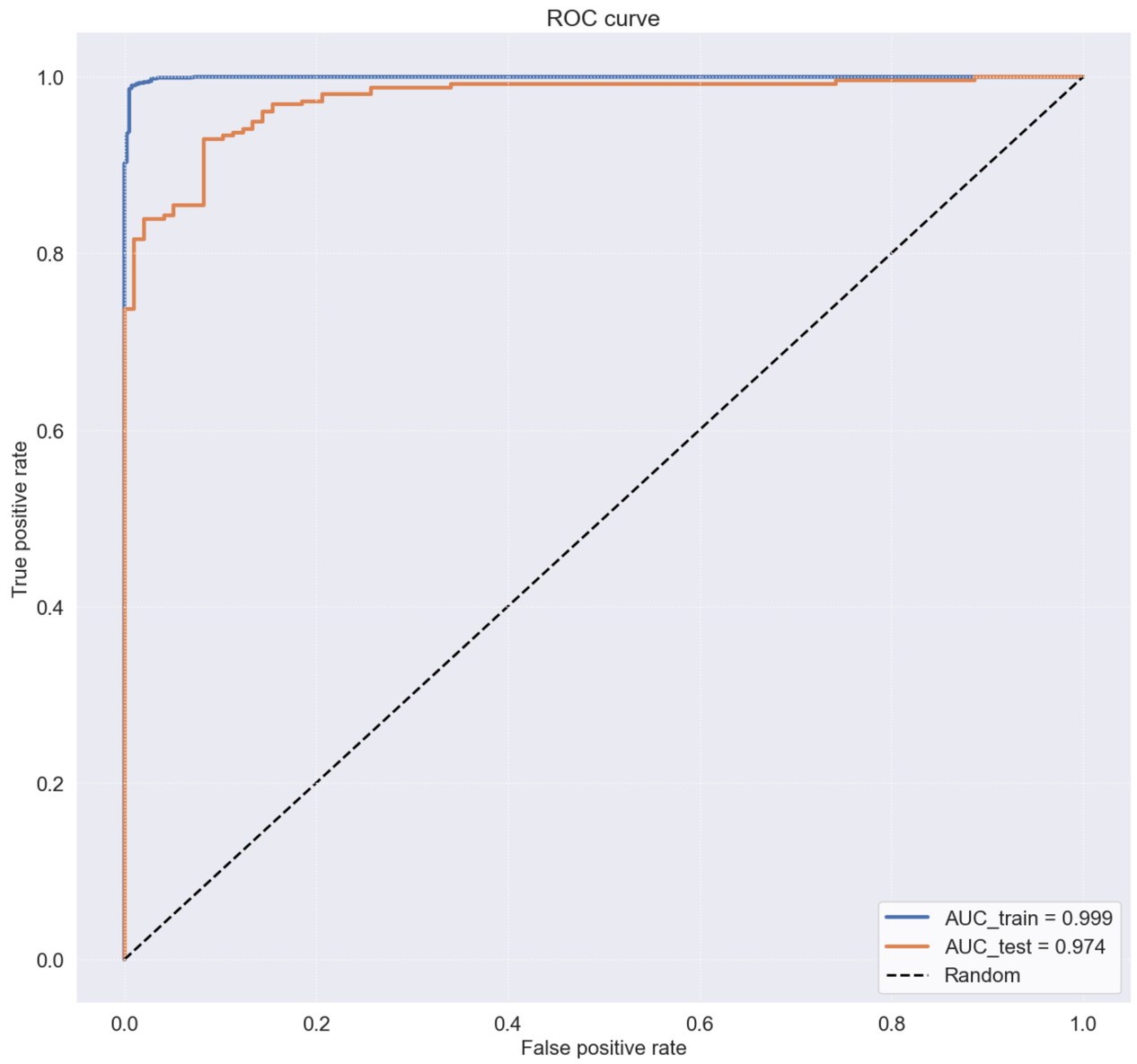


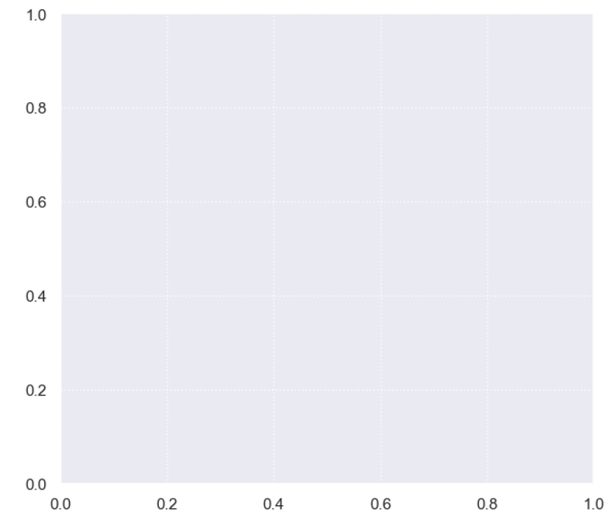


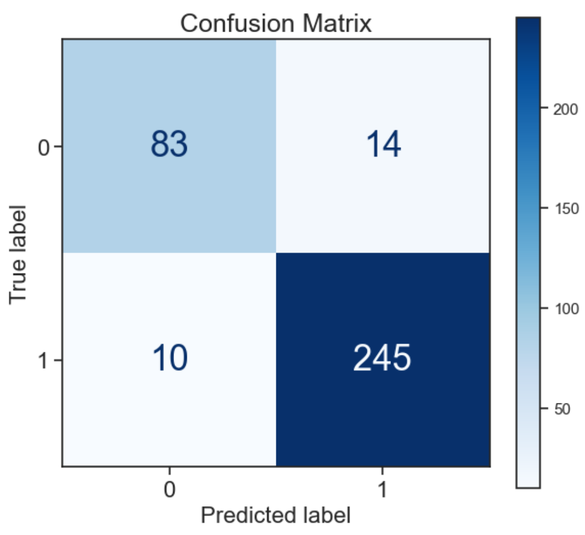
Metric	Train	Test
AUC	0.9993	0.9757
accuracy	0.9893	0.929
balanced accuracy	0.9847	0.9095
recall_(sens)	0.9951	0.9529
specificity	0.9744	0.866
precision	0.9902	0.9492
f1_score	0.9893	0.9289

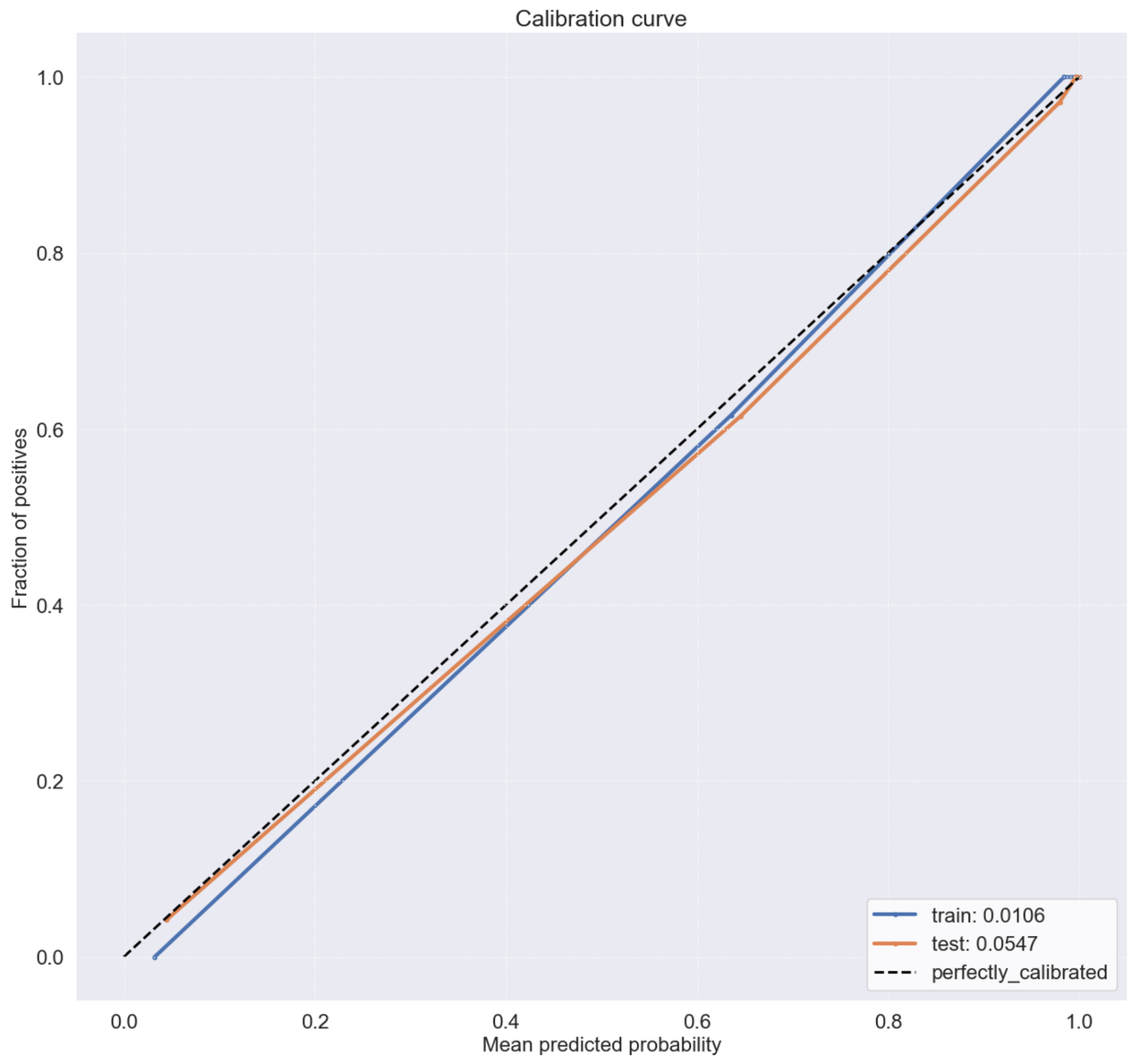
Protein: P20309 - metric: SoftVotingXGBoostEnsemble

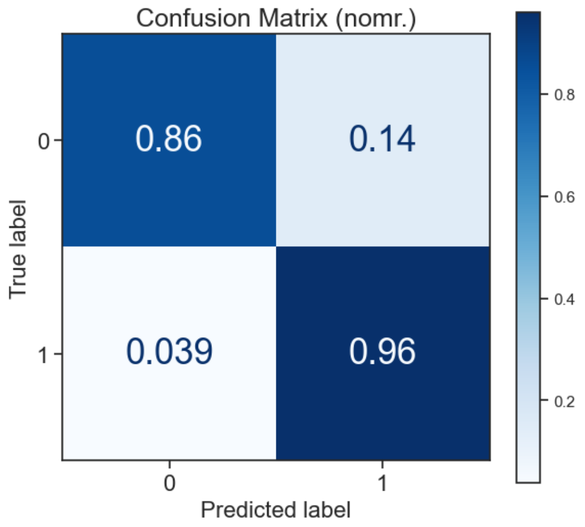


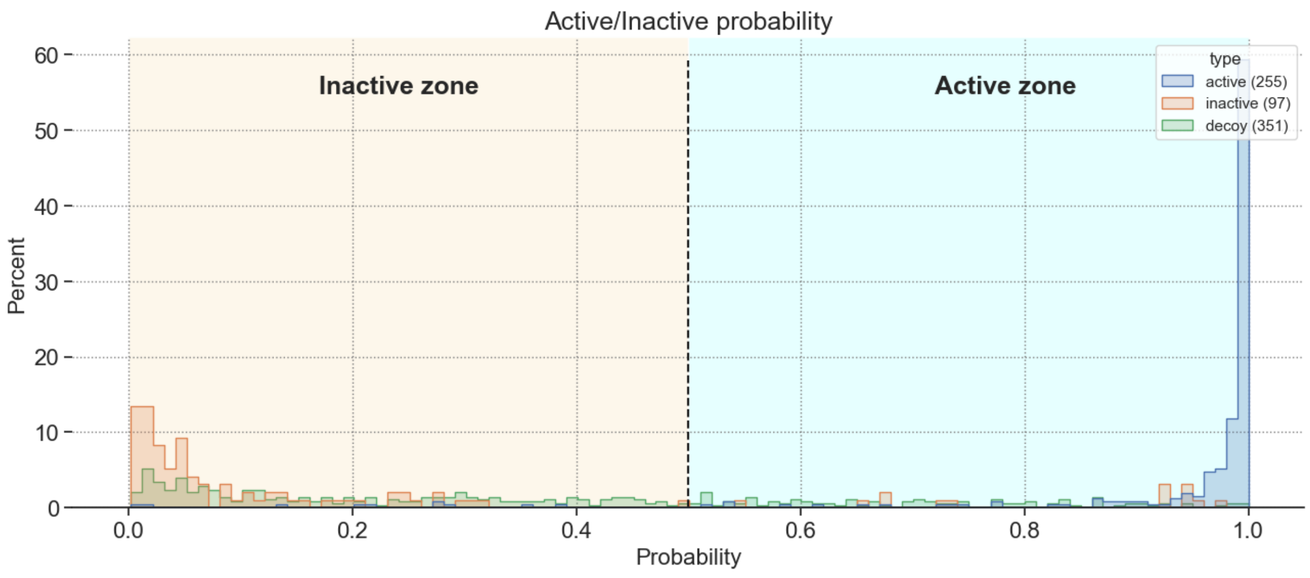












Metric	Train	Test
AUC	0.9994	0.9744
accuracy	0.9886	0.9318
balanced accuracy	0.9834	0.9082
recall_(sens)	0.9951	0.9608
specificity	0.9718	0.8557
precision	0.9893	0.9459
f1_score	0.9886	0.9314