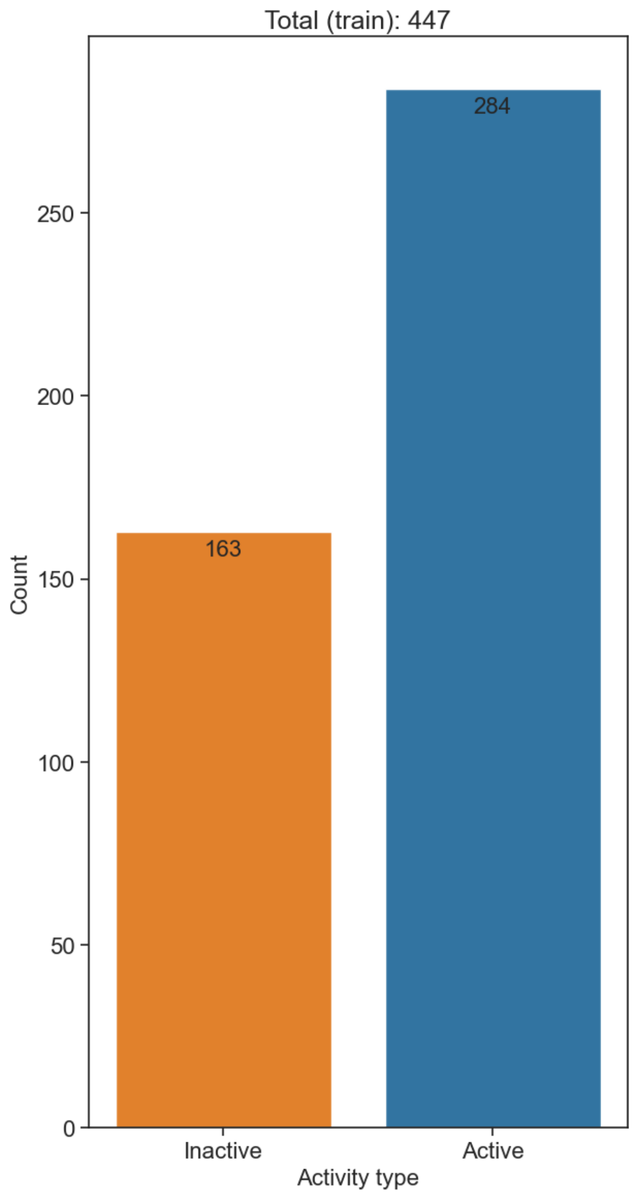
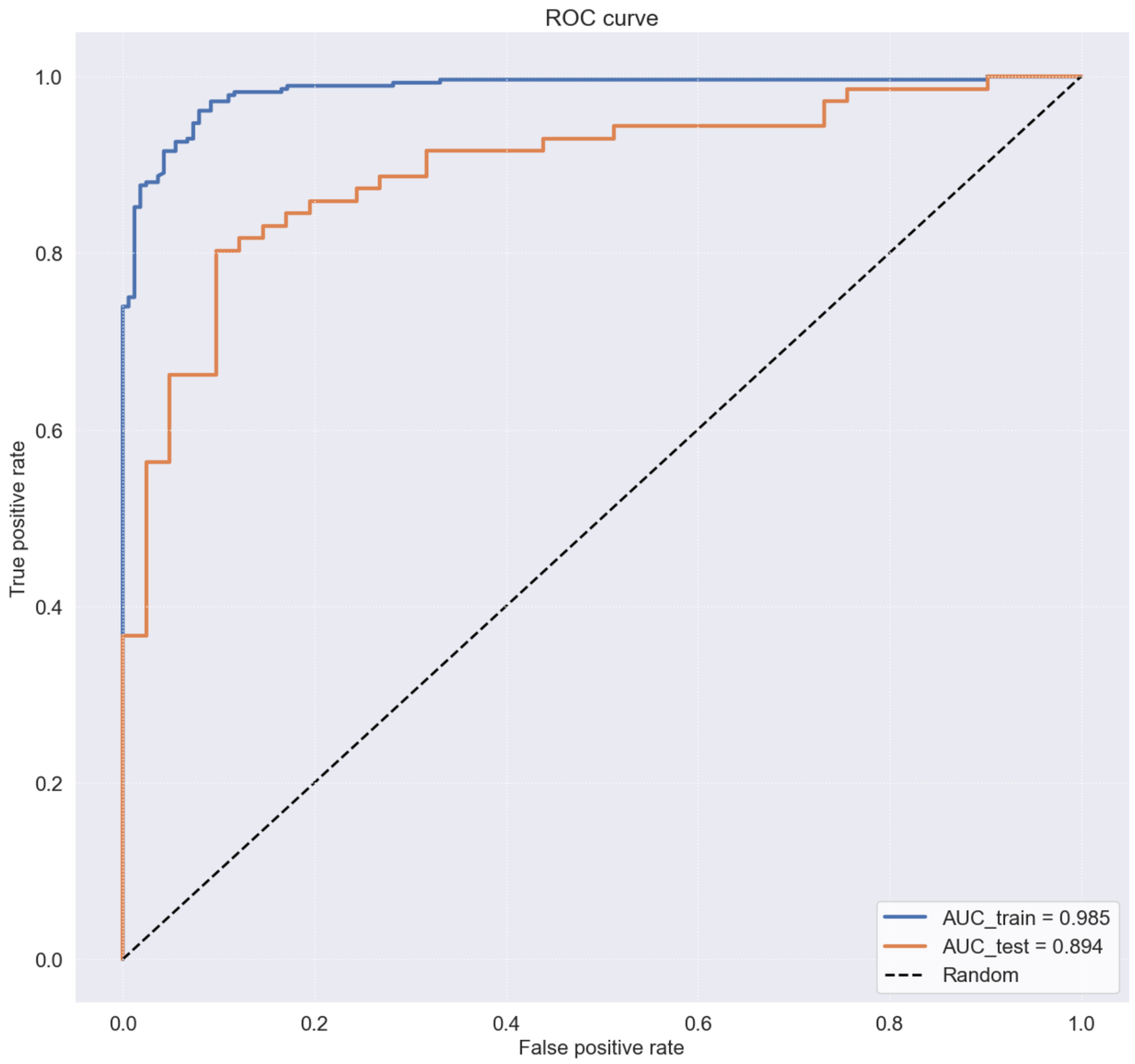
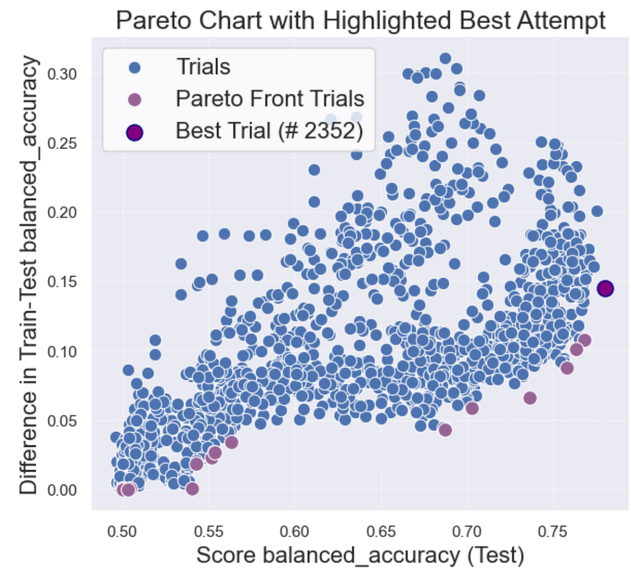
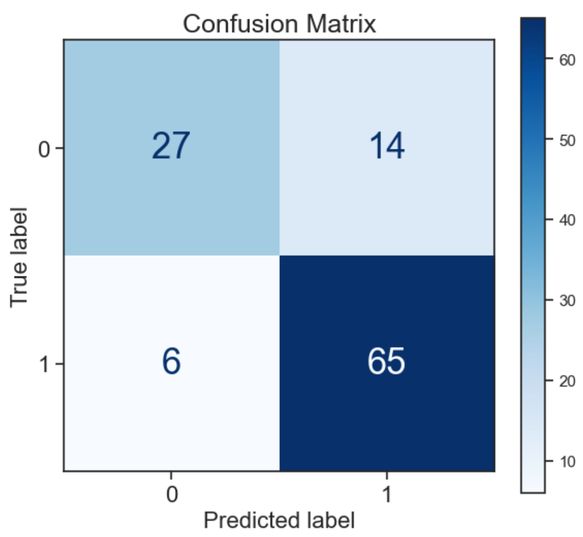
Protein: P49840 - metric: balanced_accuracy

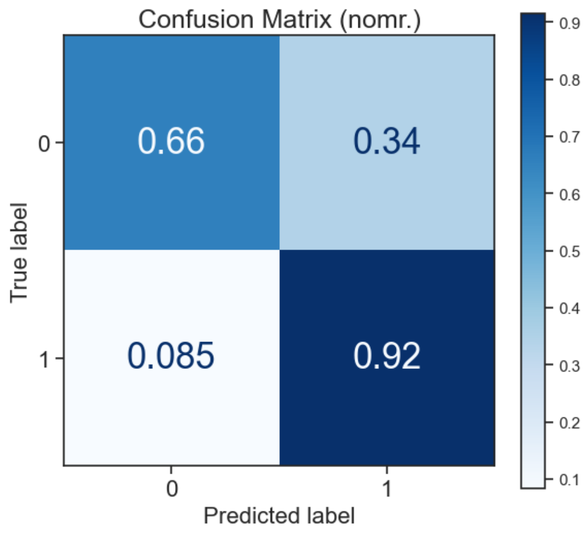


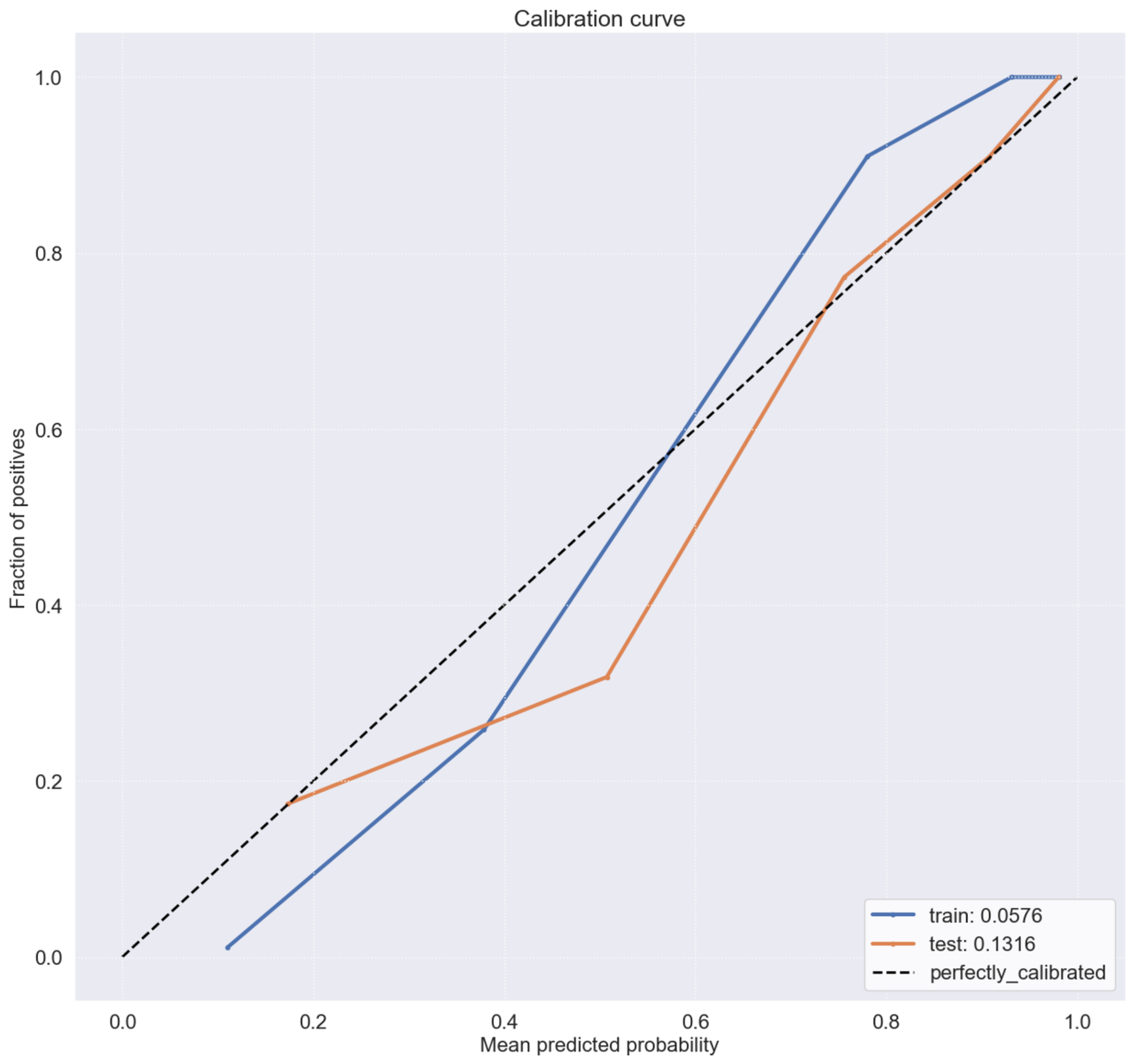


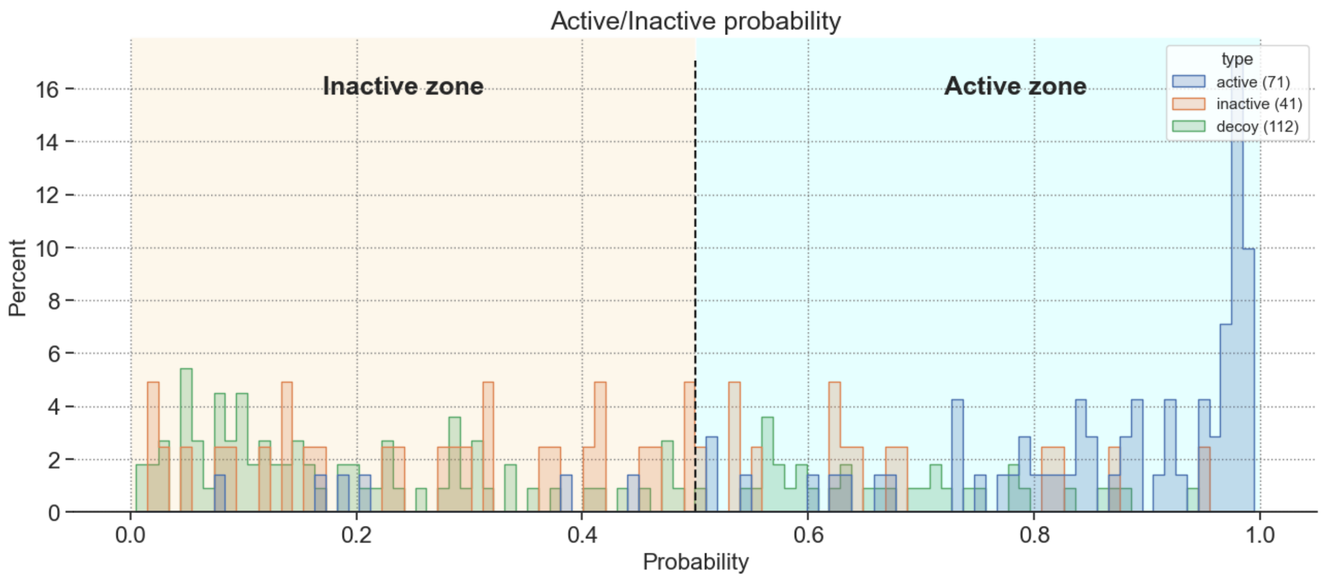


XGBoost Parameters	Value
alpha	1.4636
colsample_bytree	0.7369
gamma	0.1861
lambda	1.1632
learning_rate	0.0551
max_depth	8.0
min_child_weight	7.0
n_estimators	659.0
reg_alpha	0.2735
reg_lambda	0.478
scale_pos_weight	1.0154
subsample	0.9331



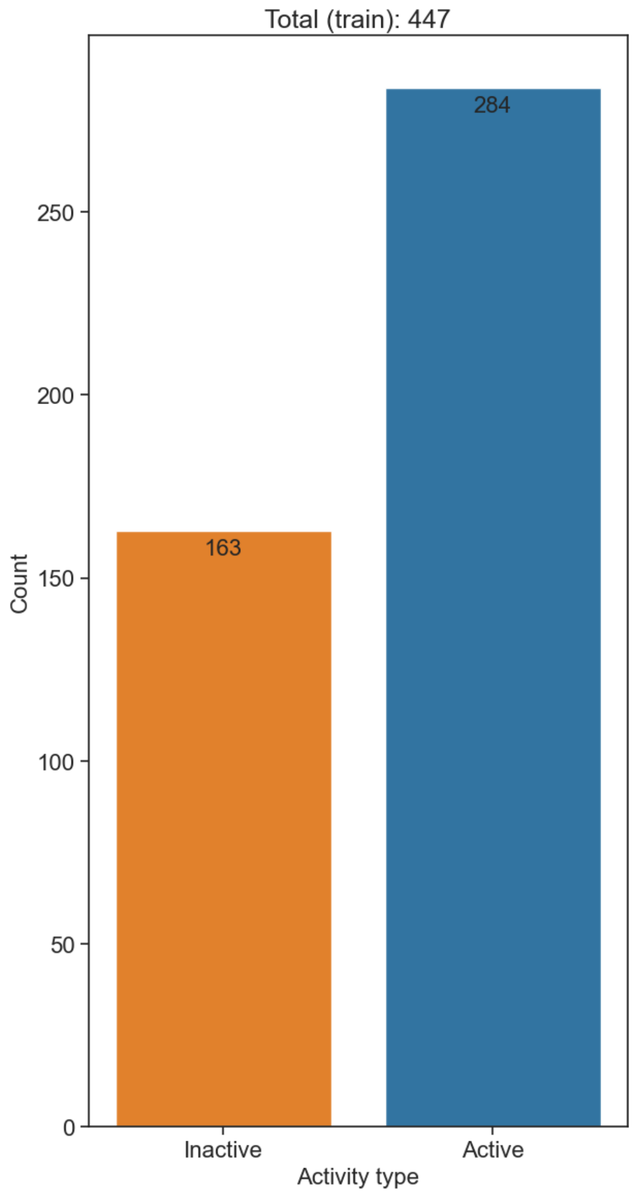


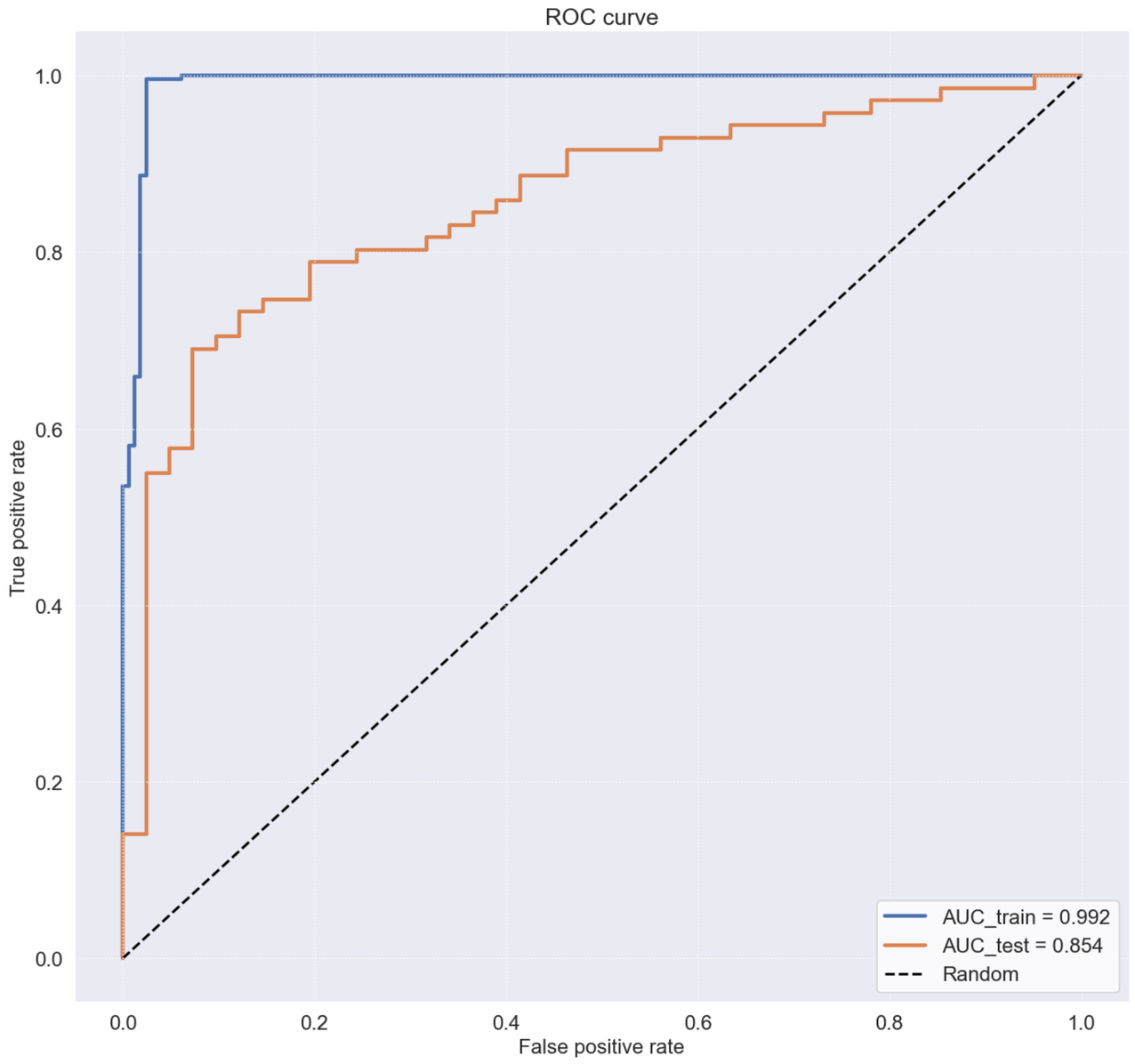


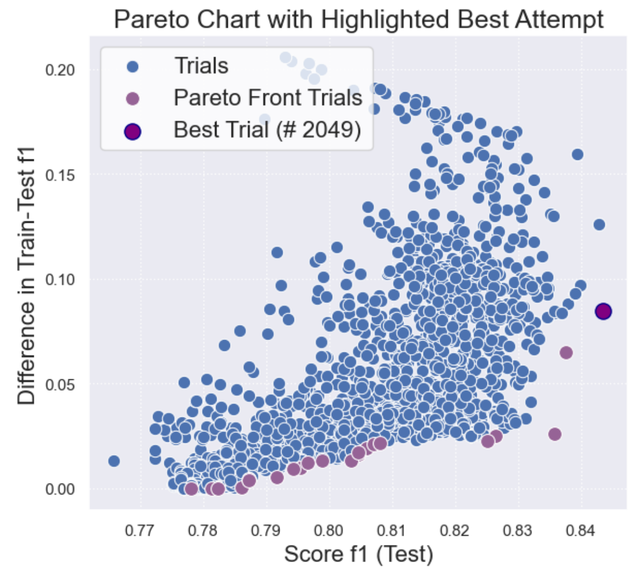


Metric	Train	Test
AUC	0.9848	0.8942
accuracy	0.9396	0.8214
balanced accuracy	0.9355	0.787
recall_(sens)	0.9507	0.9155
specificity	0.9202	0.6585
precision	0.9541	0.8228
f1_score	0.9396	0.8165

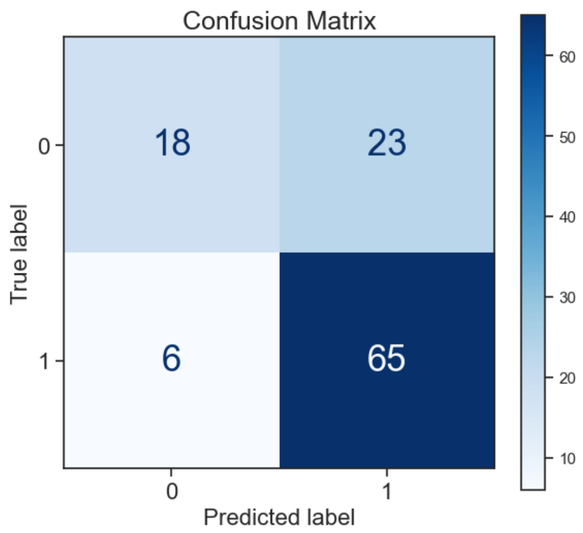
Protein: P49840 - metric: f1

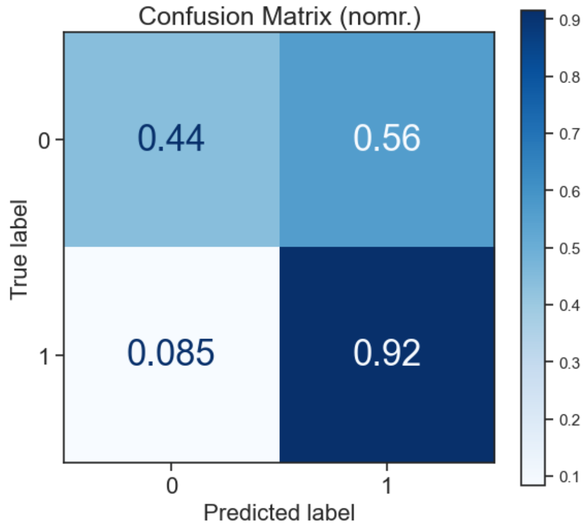


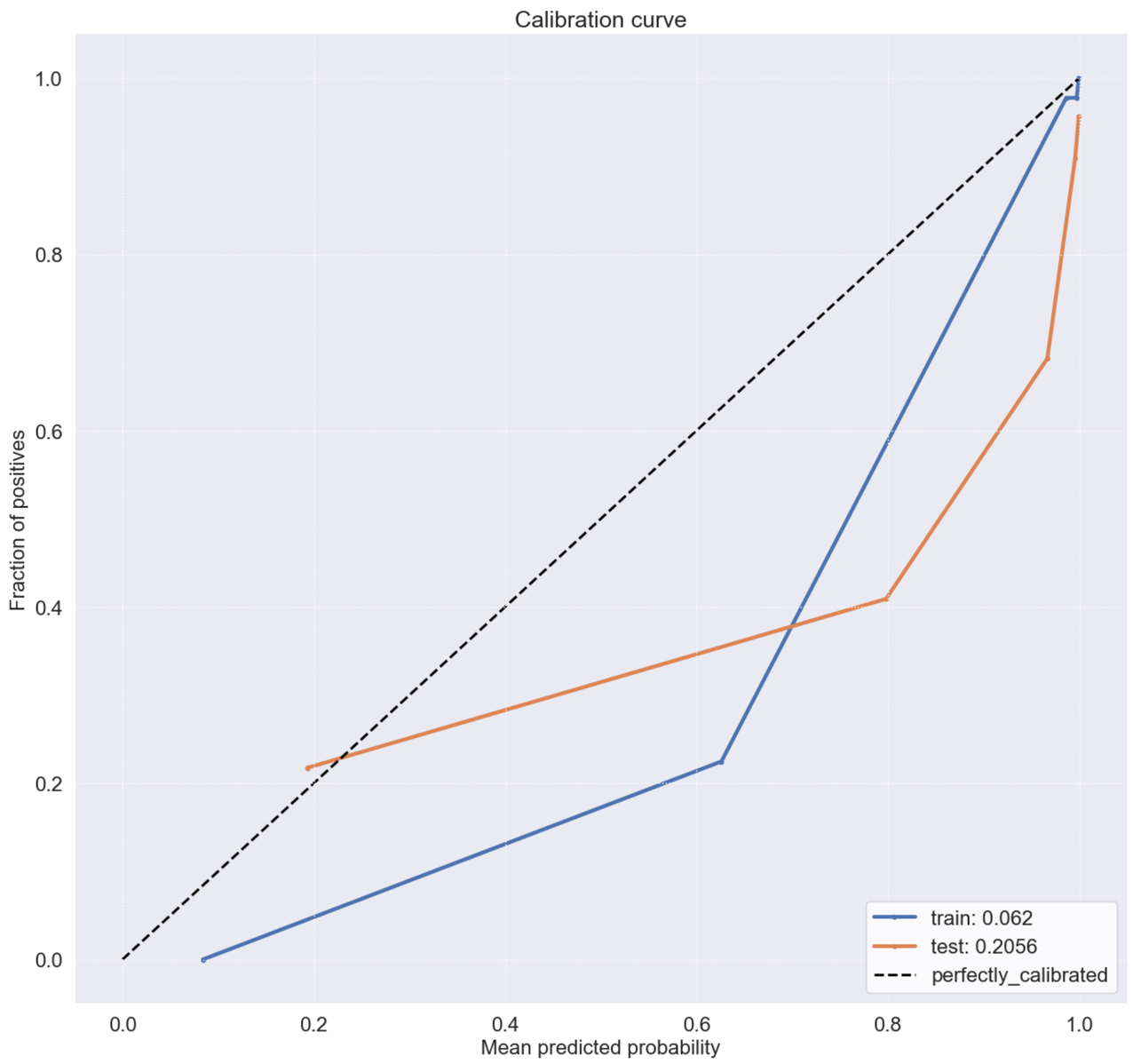


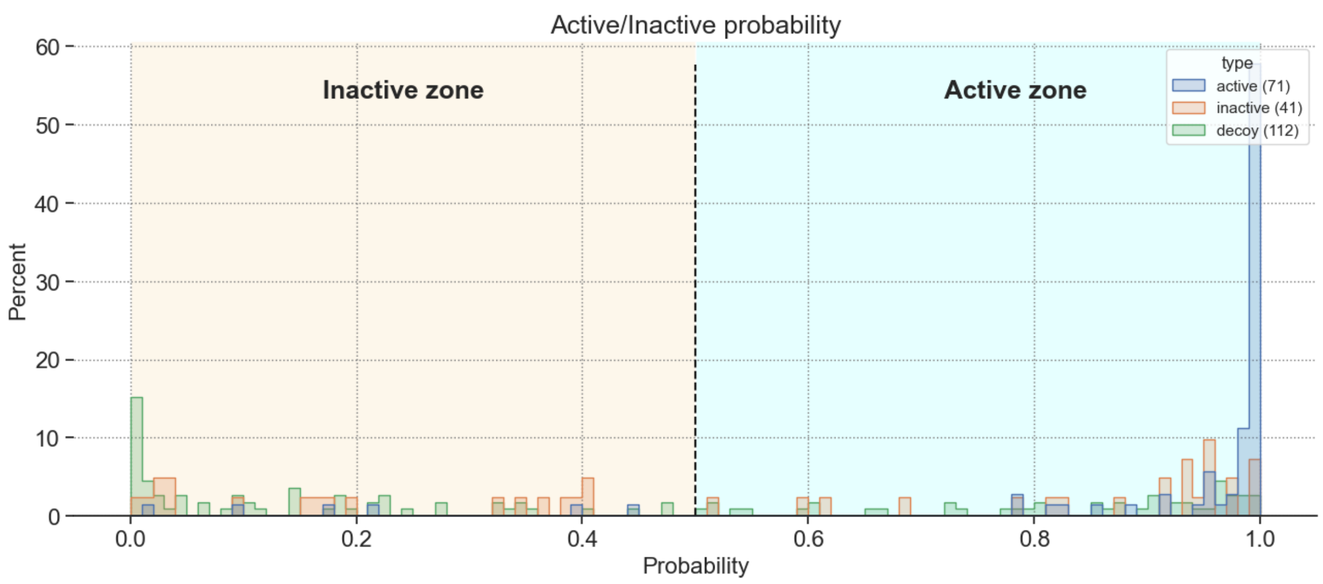


XGBoost Parameters	Value
alpha	2.9313
colsample_bytree	0.7897
gamma	0.4848
lambda	4.0272
learning_rate	0.3476
max_depth	9.0
min_child_weight	9.0
n_estimators	508.0
reg_alpha	0.9157
reg_lambda	0.4859
scale_pos_weight	22.7098
subsample	0.6109



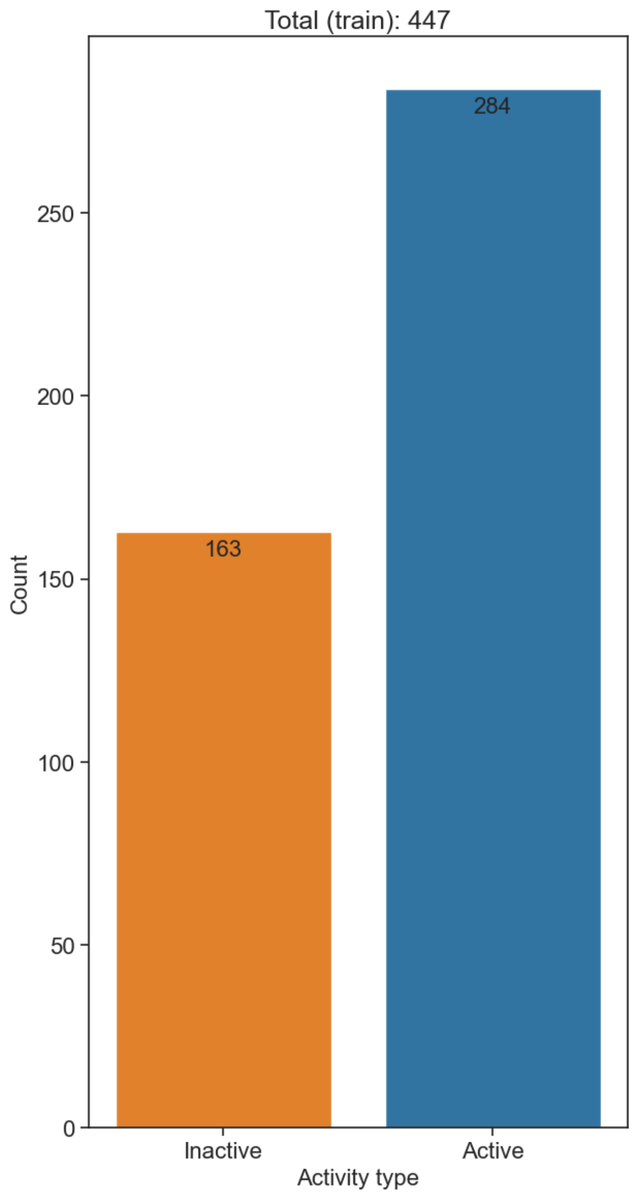


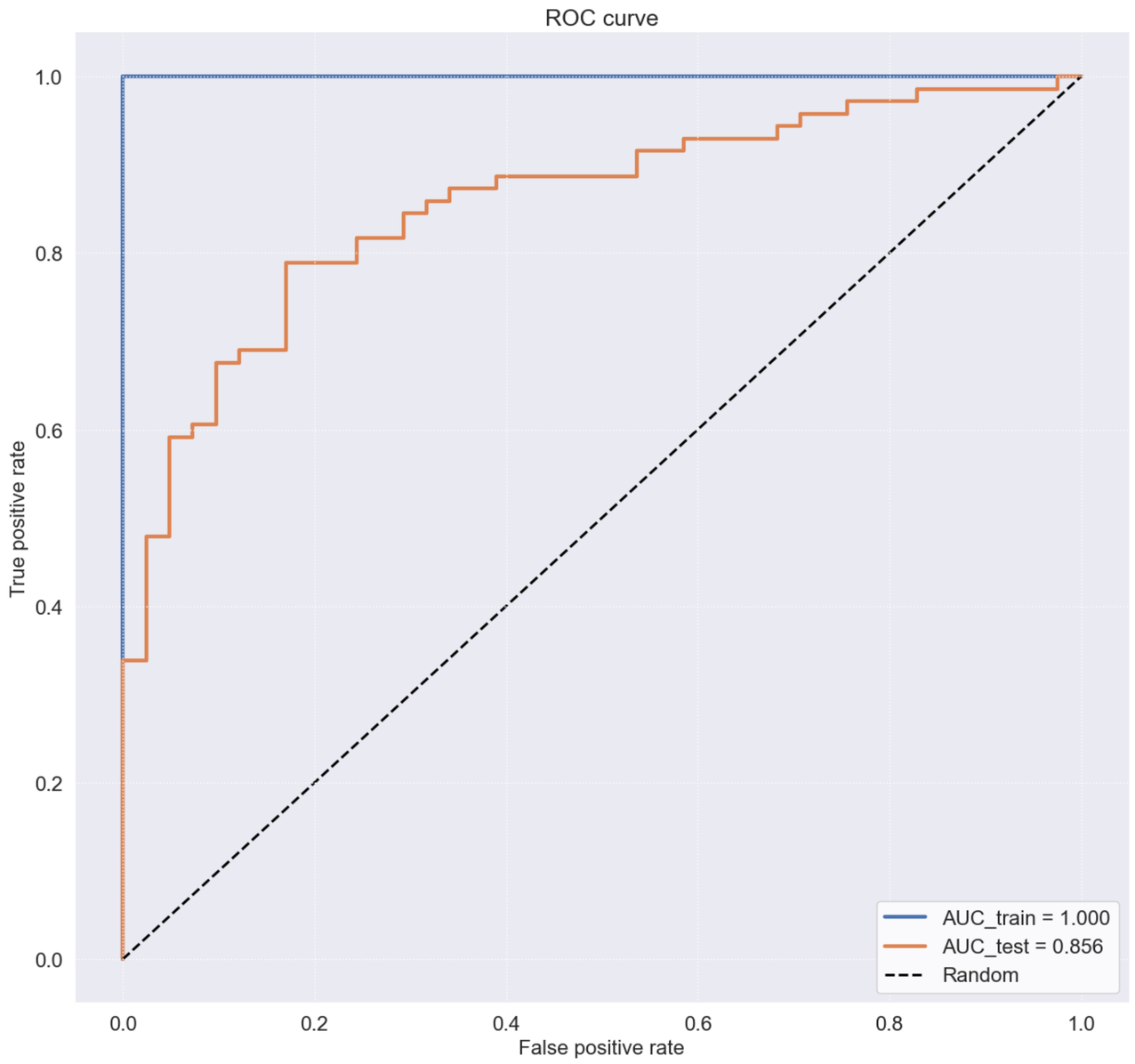


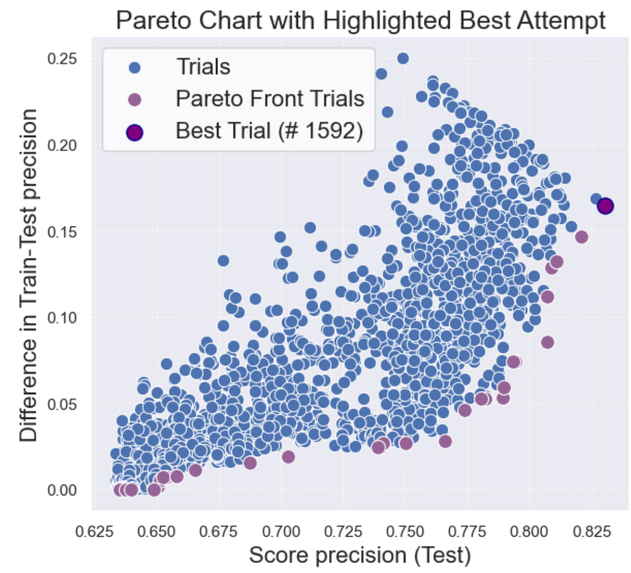


Metric	Train	Test
AUC	0.9917	0.8537
accuracy	0.9128	0.7411
balanced accuracy	0.8804	0.6773
recall_(sens)	1.0	0.9155
specificity	0.7607	0.439
precision	0.8793	0.7386
f1_score	0.9096	0.7211

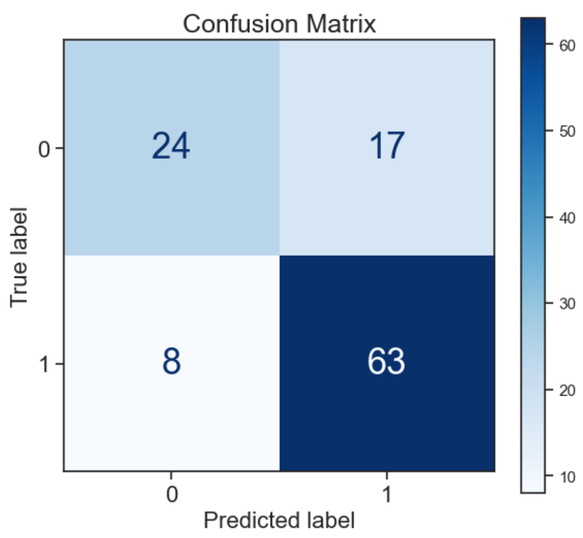
Protein: P49840 - metric: precision

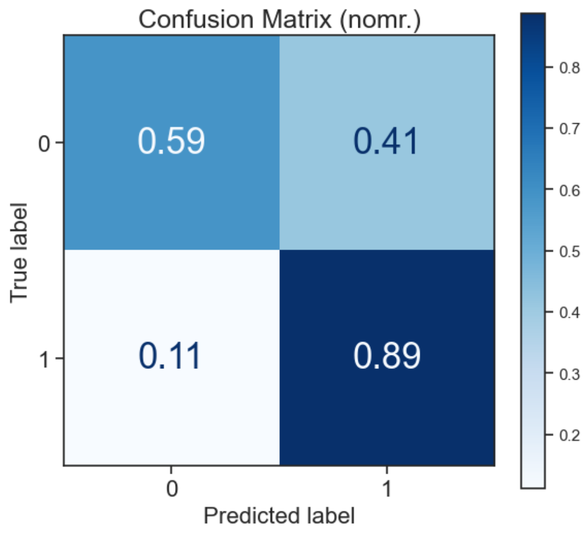


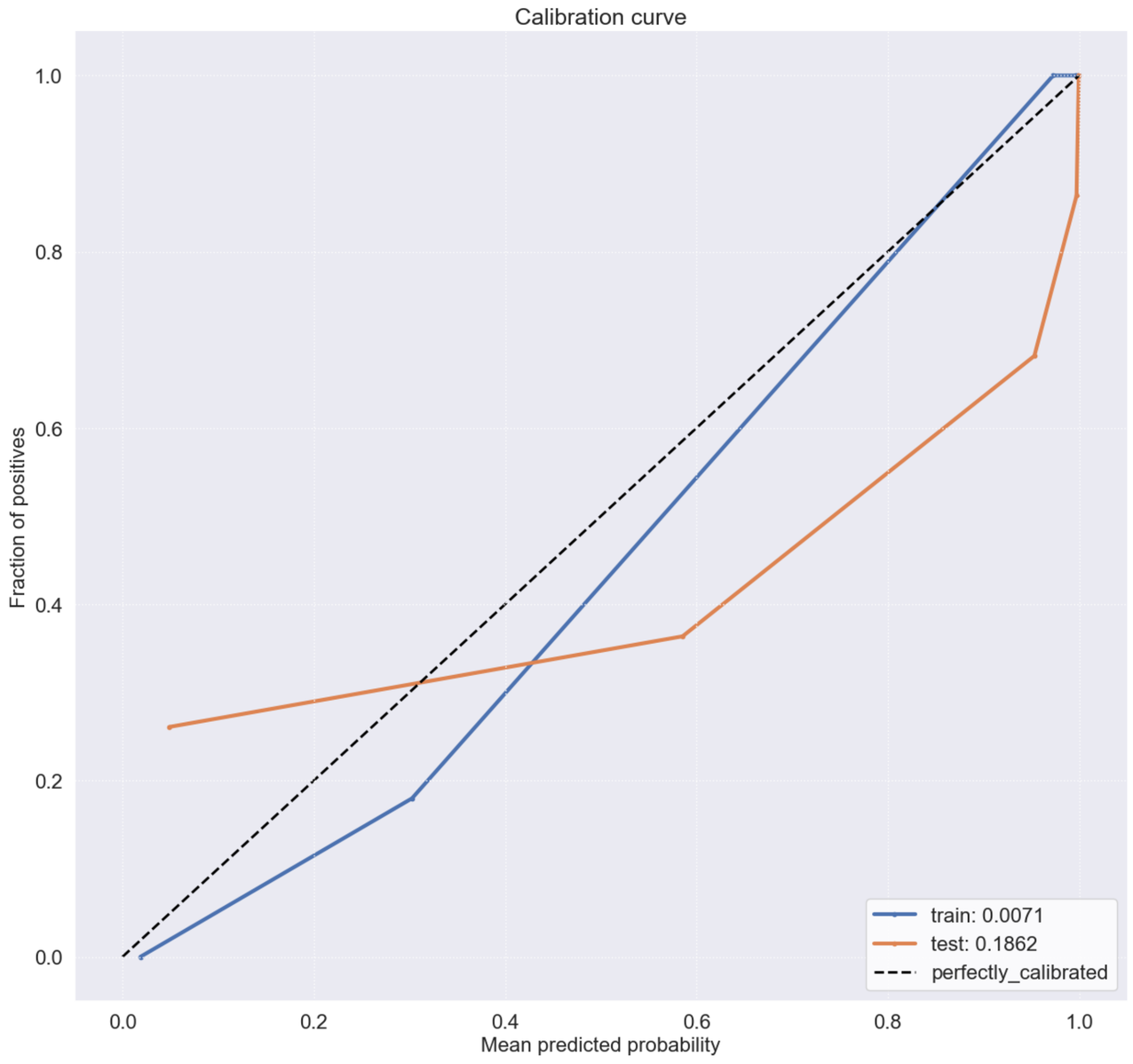


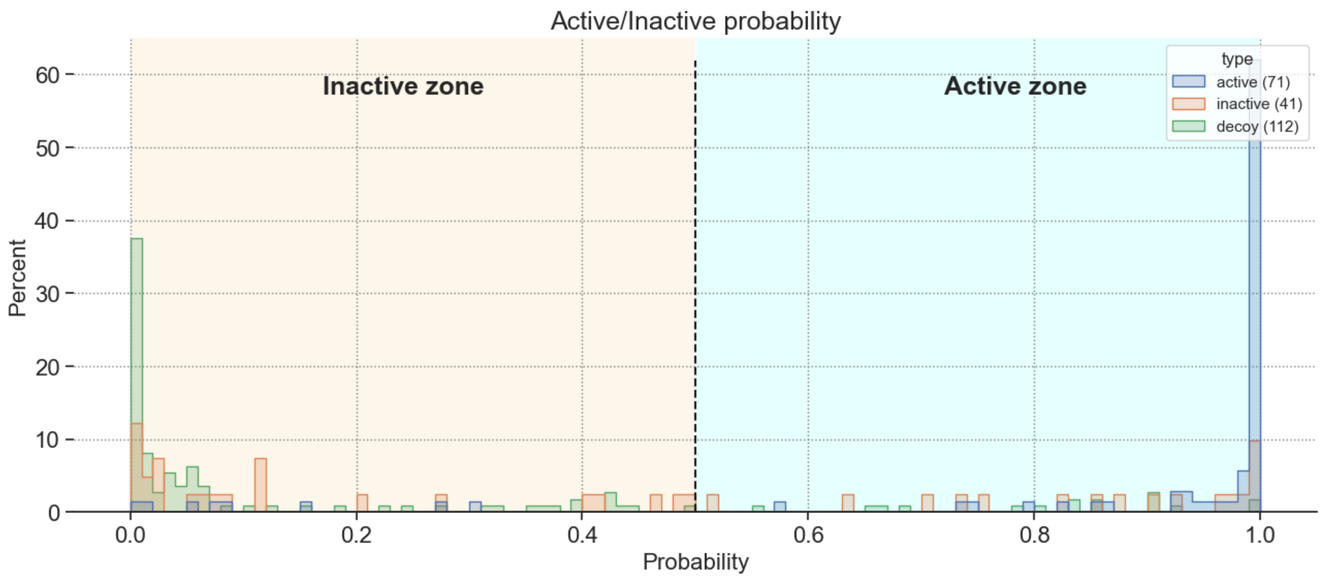


XGBoost Parameters	Value
alpha	1.9999
colsample_bytree	0.5388
gamma	0.2914
lambda	3.2909
learning_rate	0.865
max_depth	9.0
min_child_weight	2.0
n_estimators	742.0
reg_alpha	0.8004
reg_lambda	0.6208
scale_pos_weight	3.7381
subsample	0.6425



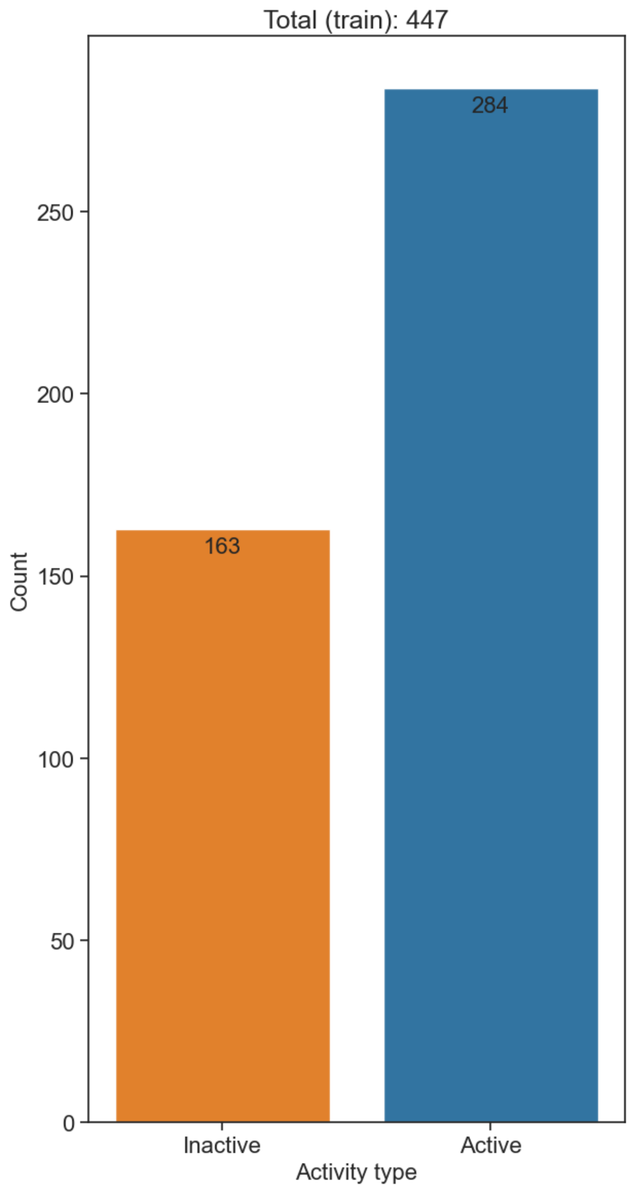


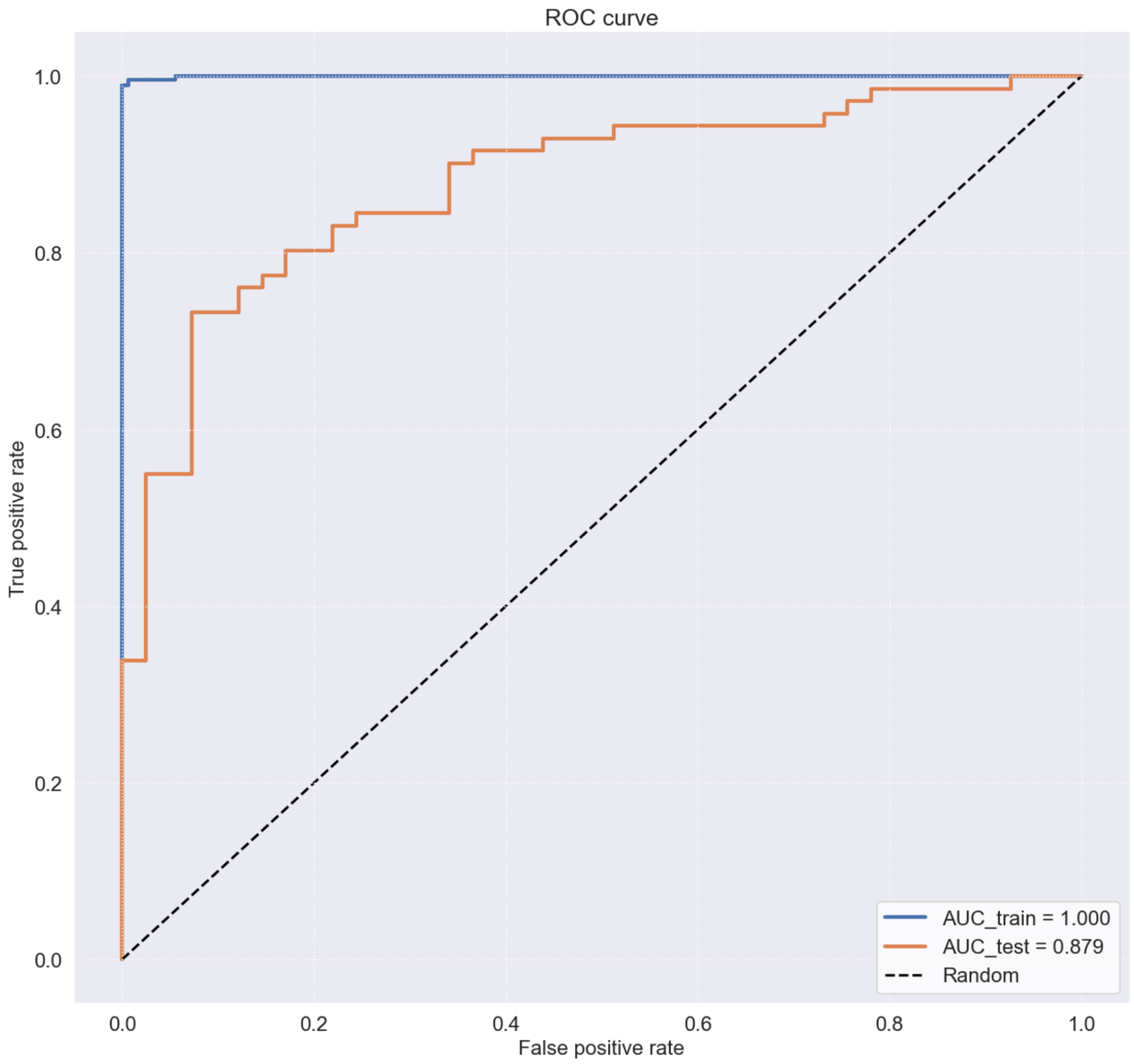


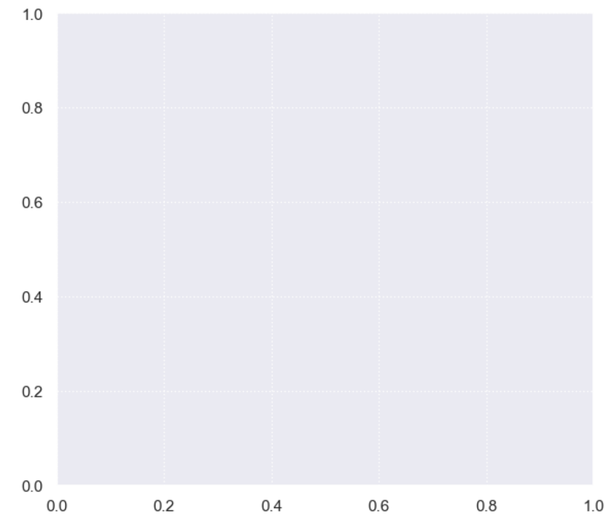


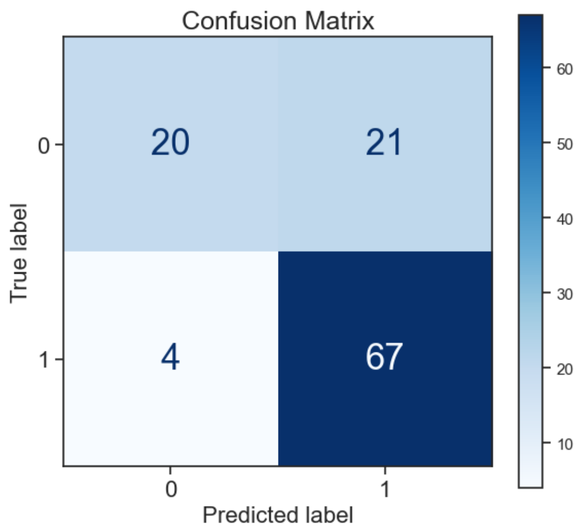
Metric	Train	Test
AUC	1.0	0.8557
accuracy	0.9978	0.7768
balanced accuracy	0.9969	0.7363
recall_(sens)	1.0	0.8873
specificity	0.9939	0.5854
precision	0.9965	0.7875
f1_score	0.9978	0.7697

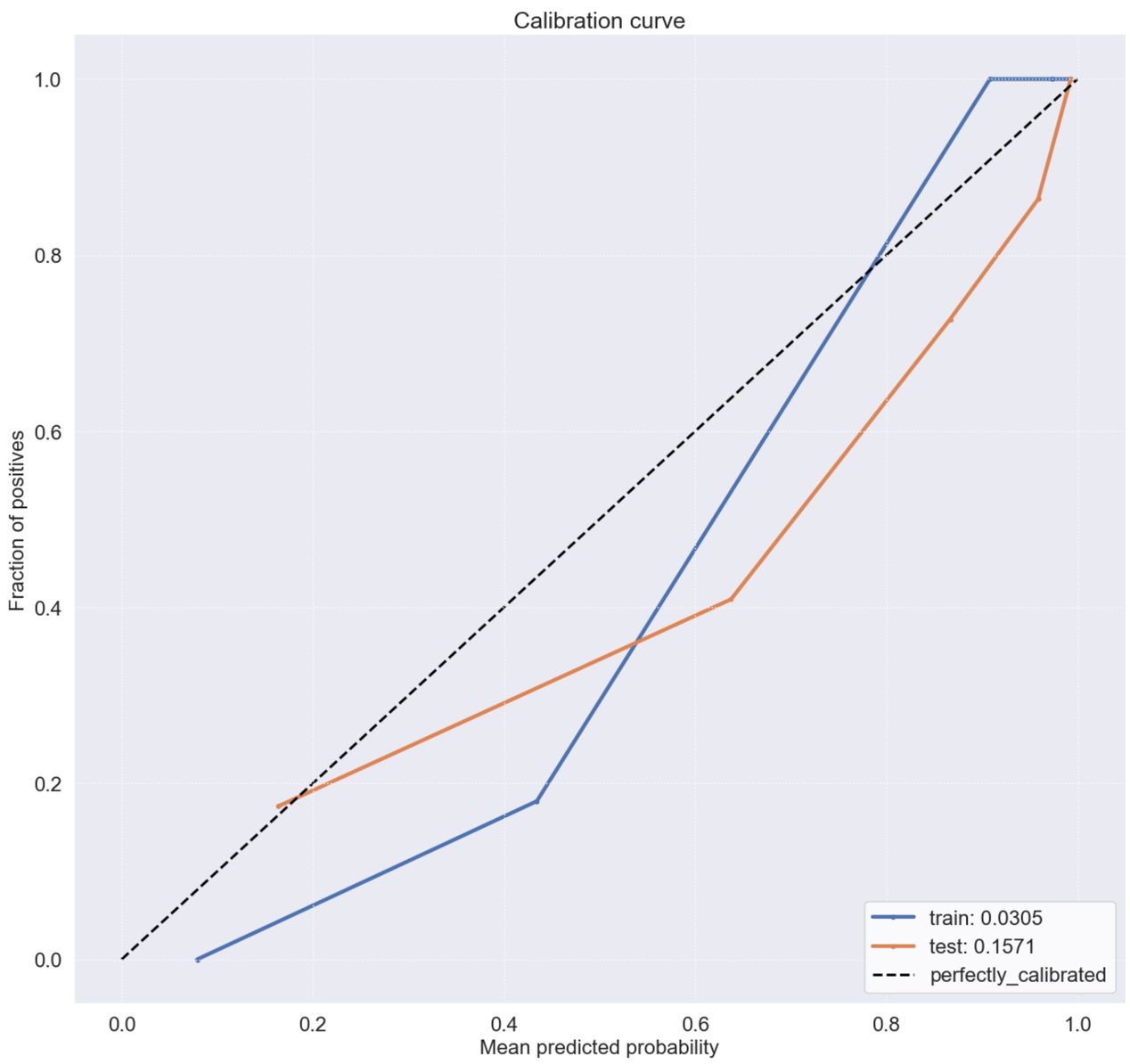
Protein: P49840 - metric: SoftVotingXGBoostEnsemble

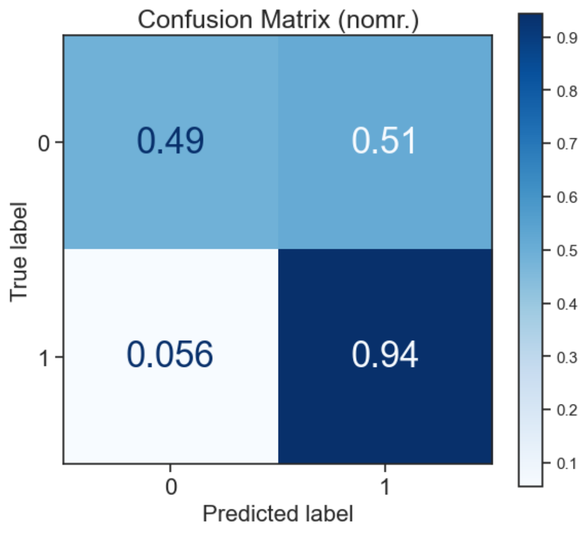


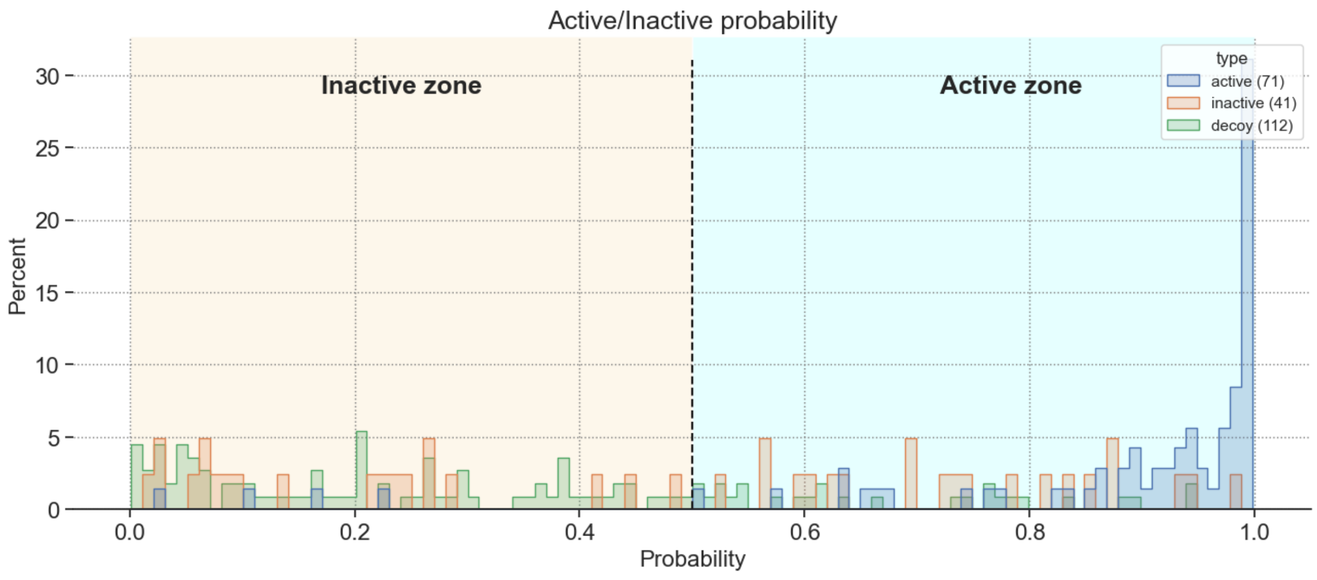












Metric	Train	Test
AUC	0.9998	0.8787
accuracy	0.9754	0.7768
balanced accuracy	0.9663	0.7157
recall_(sens)	1.0	0.9437
specificity	0.9325	0.4878
precision	0.9627	0.7614
f1_score	0.9752	0.7595