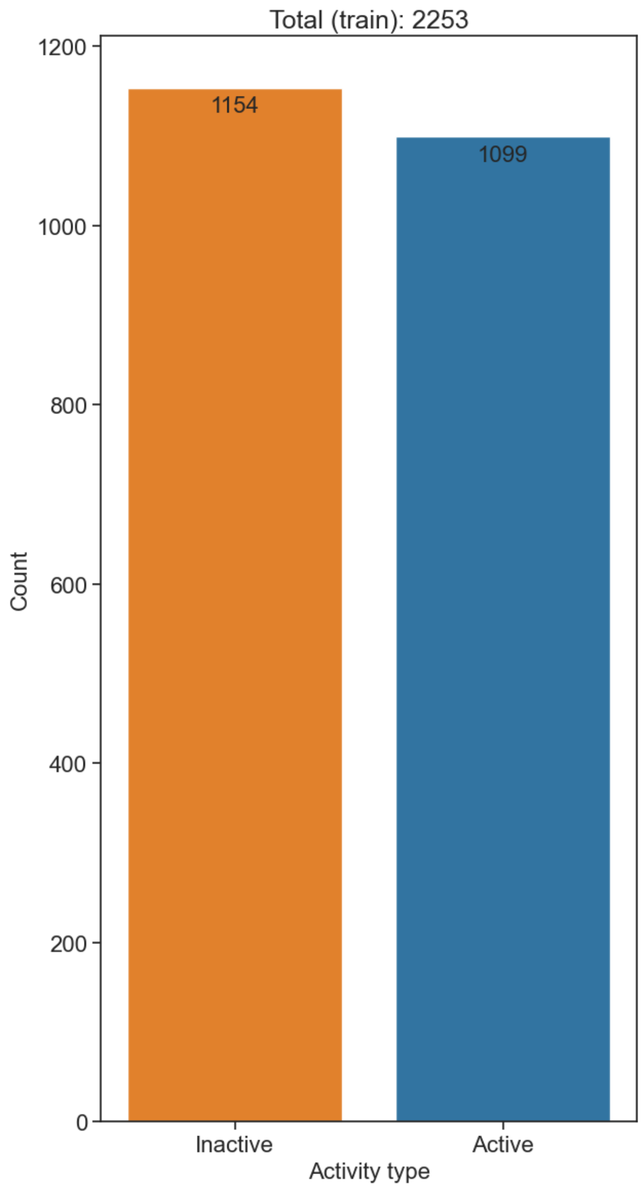
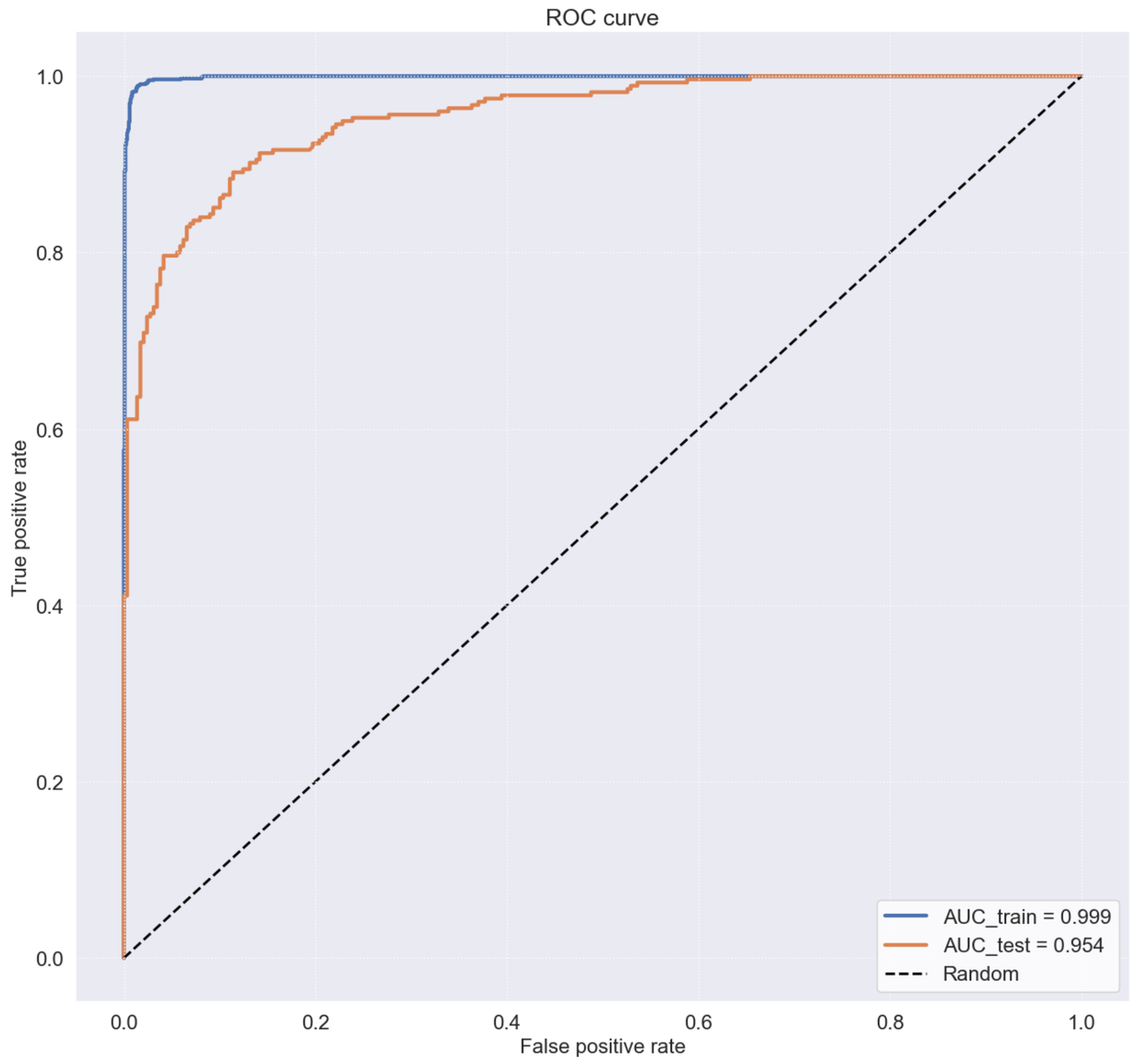
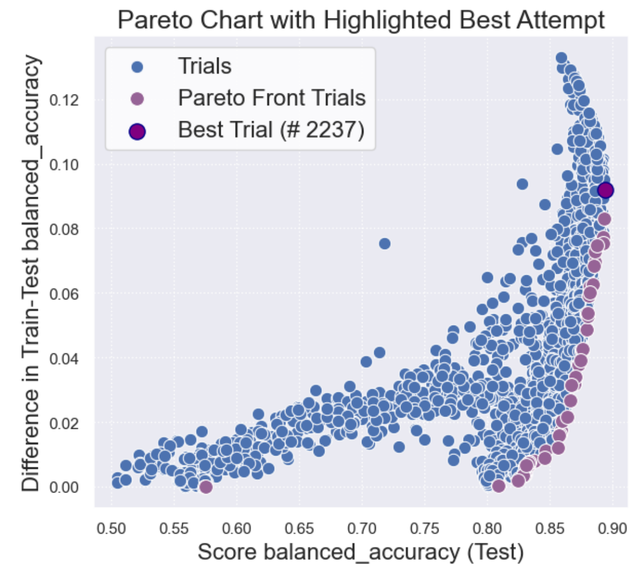
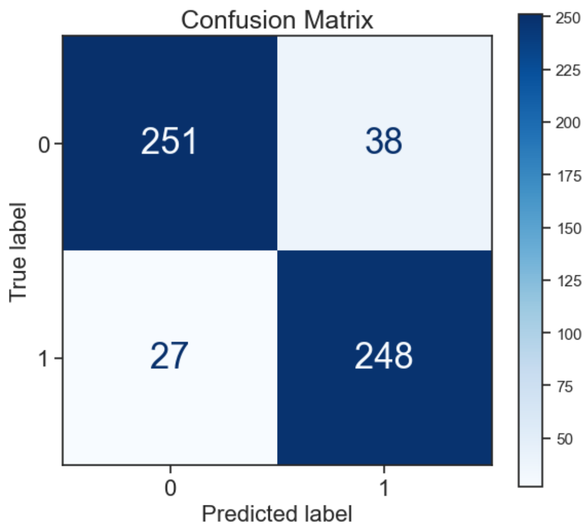
Protein: P50406 - metric: balanced_accuracy

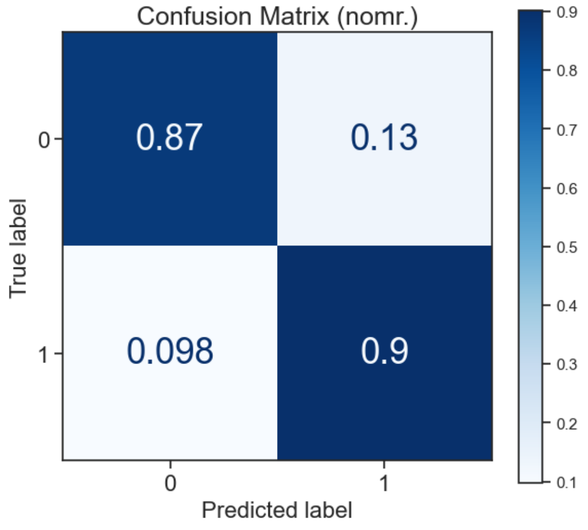


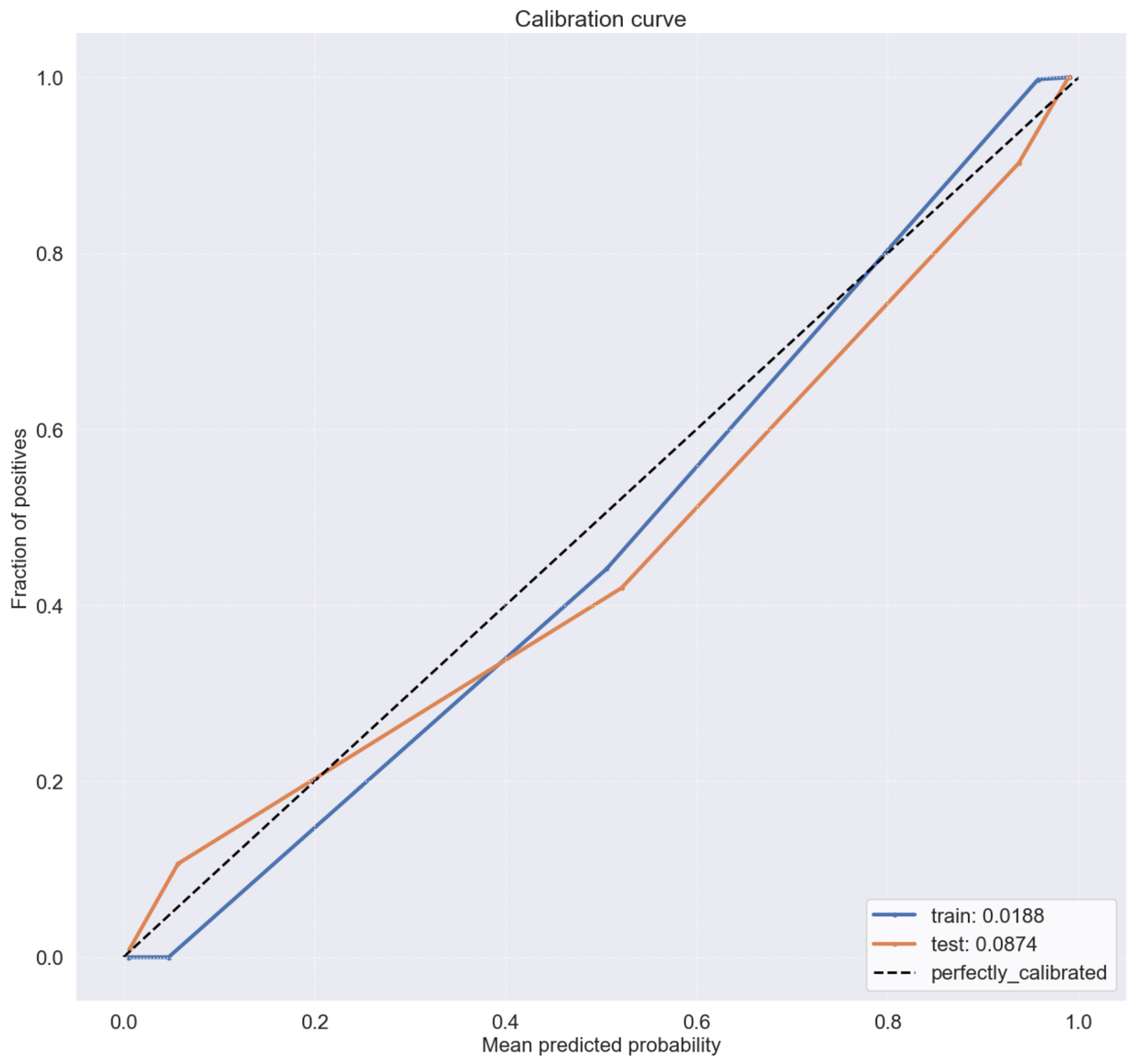


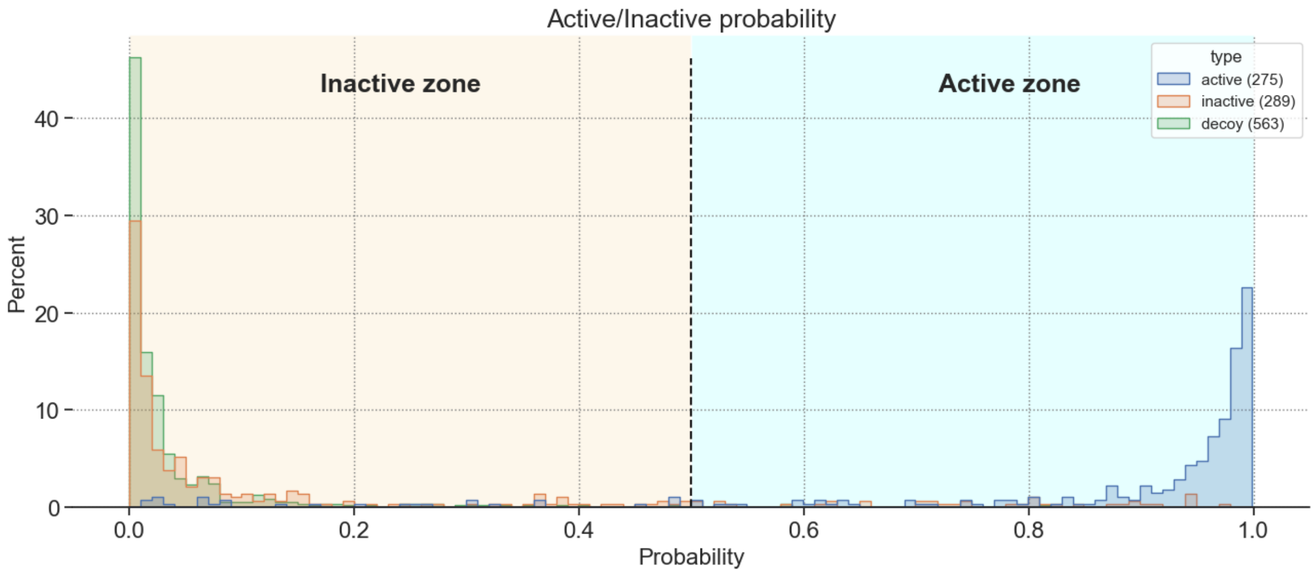


XGBoost Parameters	Value
alpha	2.2117
colsample_bytree	0.5027
gamma	0.5821
lambda	2.573
learning_rate	0.0399
max_depth	7.0
min_child_weight	1.0
n_estimators	651.0
reg_alpha	0.0408
reg_lambda	0.877
scale_pos_weight	1.4495
subsample	0.8213



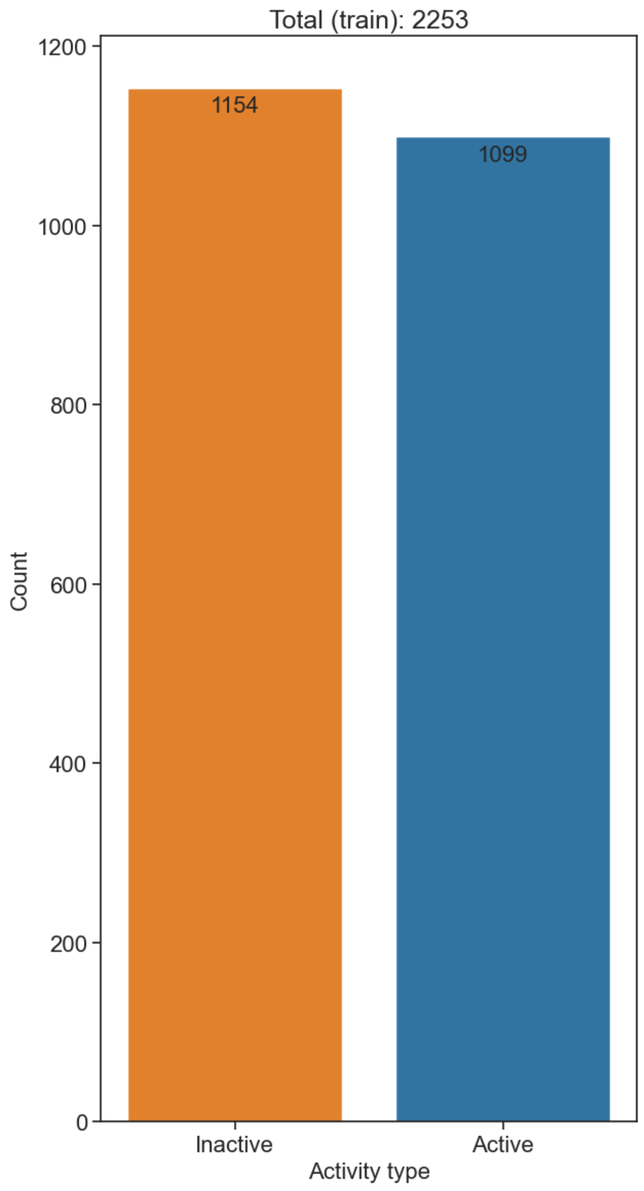


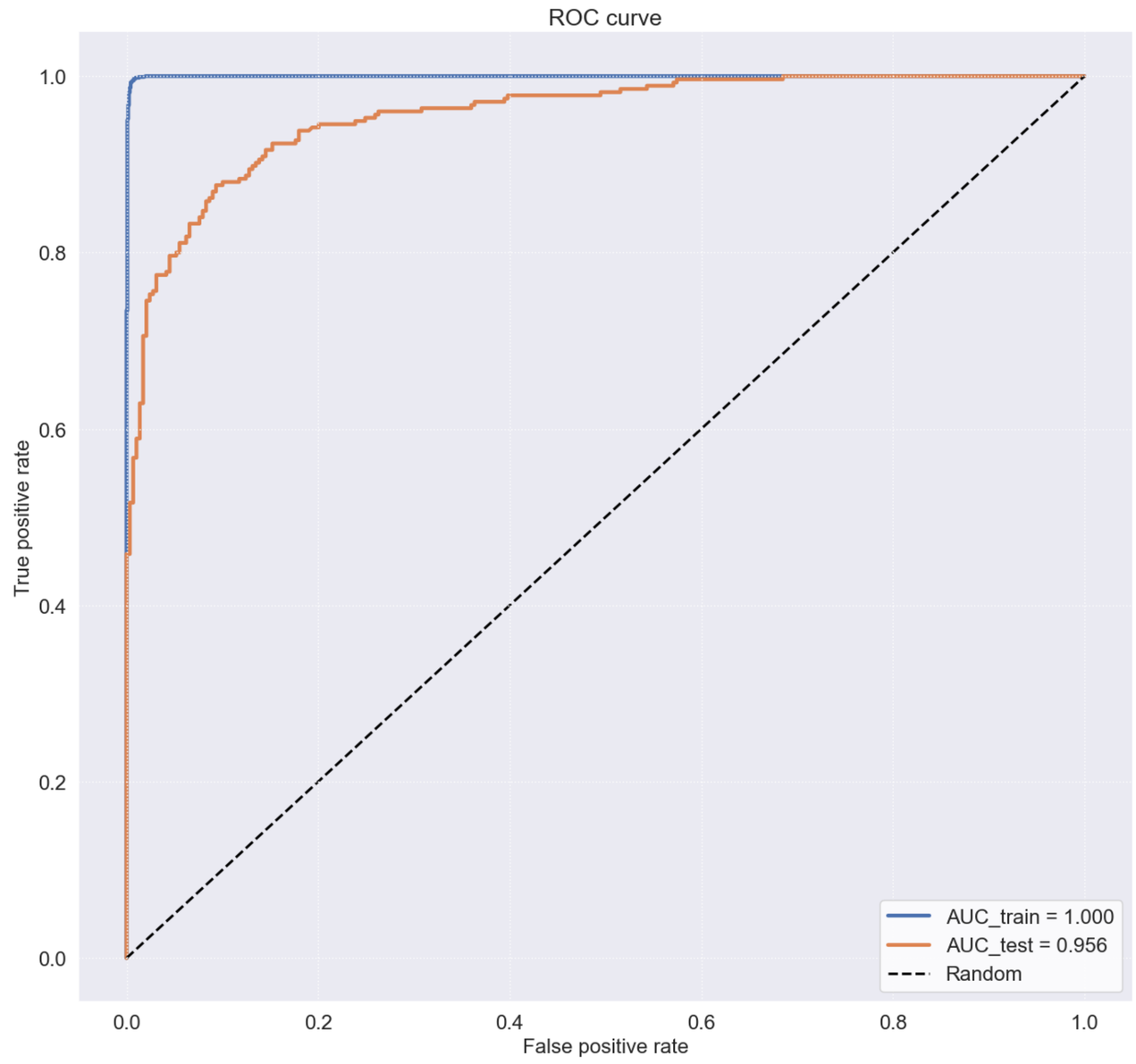


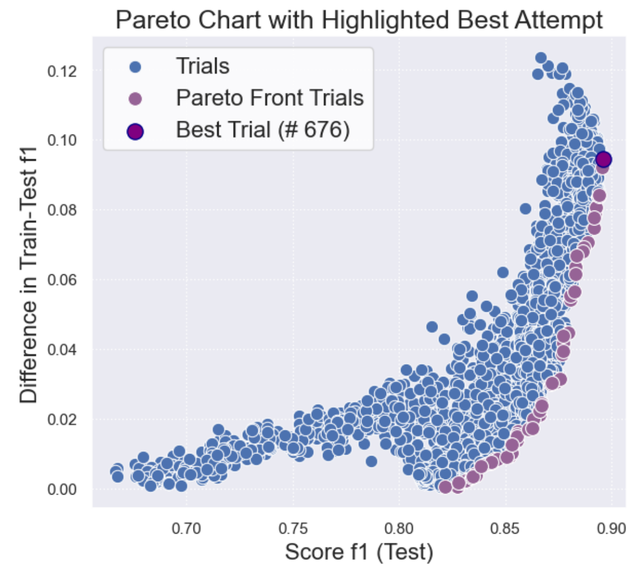


Metric	Train	Test
AUC	0.9988	0.9543
accuracy	0.984	0.8848
balanced accuracy	0.9843	0.8852
recall_(sens)	0.9945	0.9018
specificity	0.974	0.8685
precision	0.9733	0.8671
f1_score	0.984	0.8848

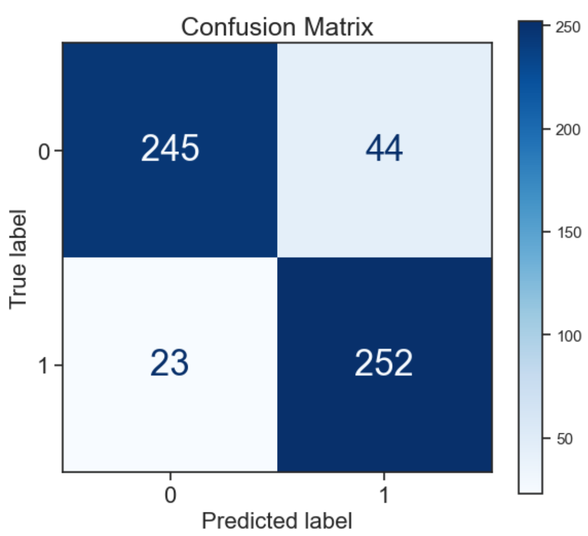
Protein: P50406 - metric: f1

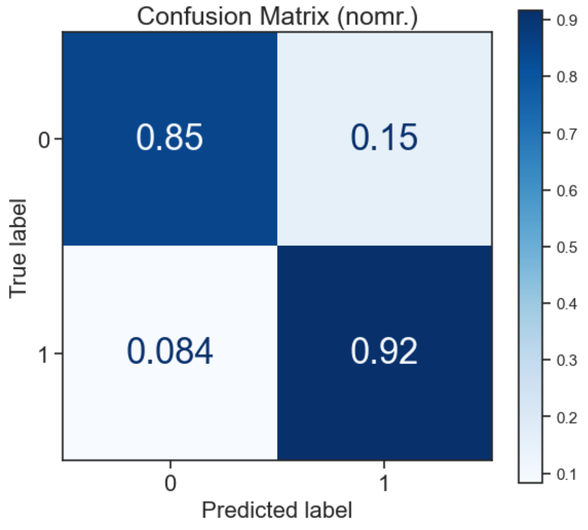


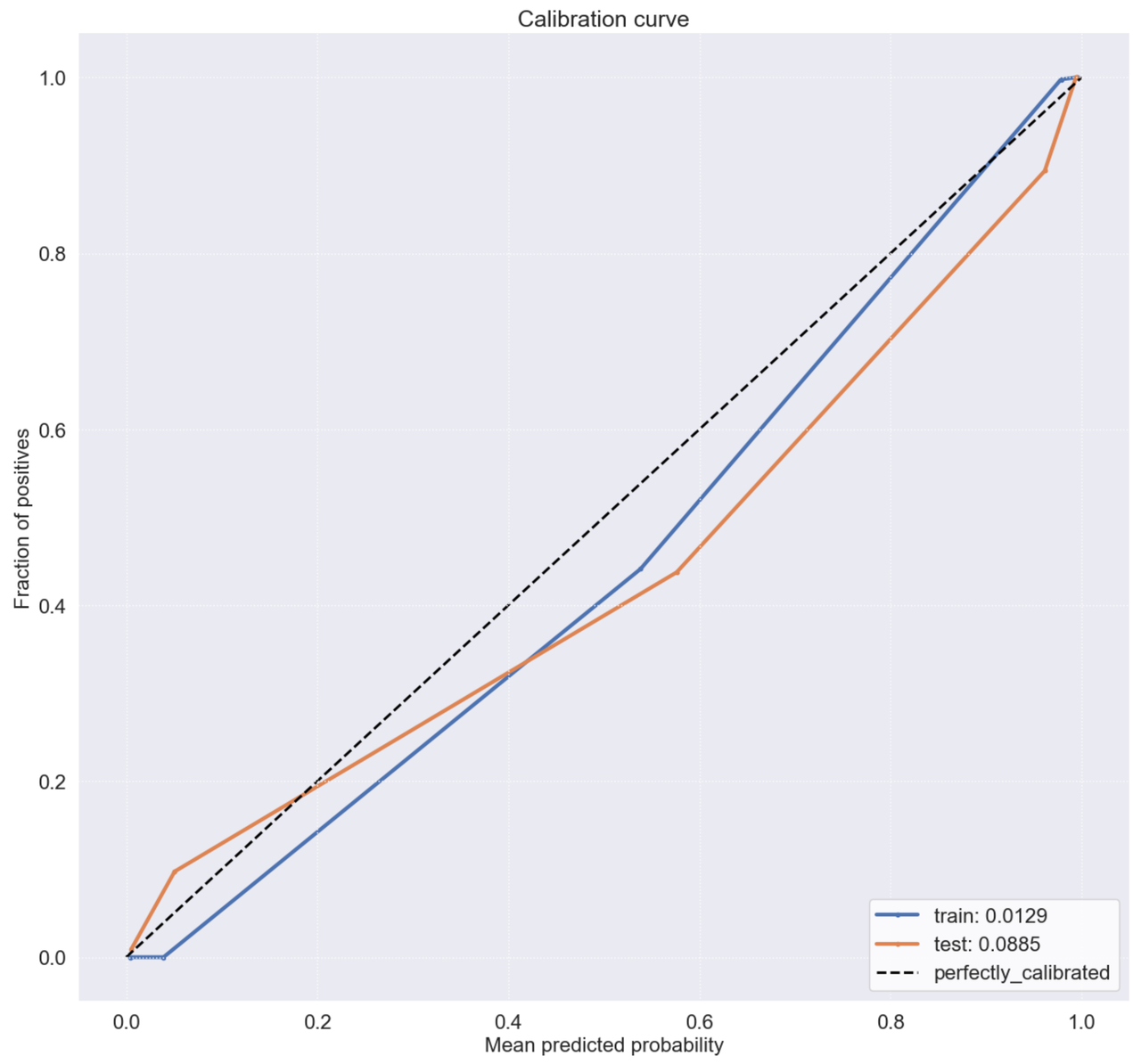


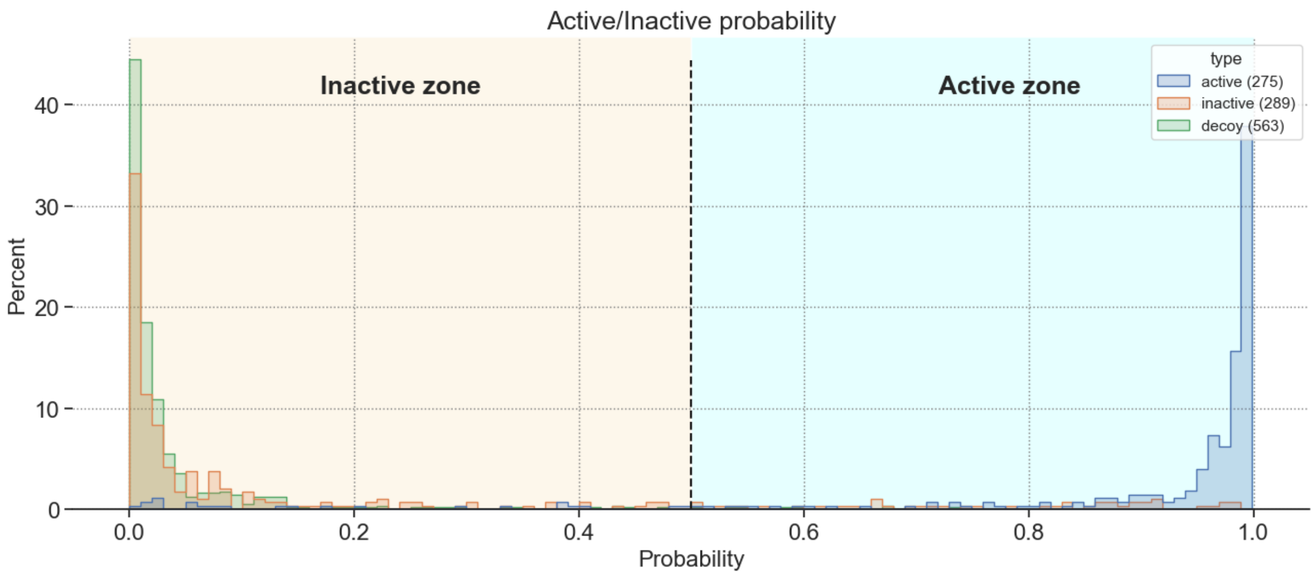


XGBoost Parameters	Value
alpha	4.3648
colsample_bytree	0.5091
gamma	0.2546
lambda	3.2404
learning_rate	0.0275
max_depth	10.0
min_child_weight	1.0
n_estimators	682.0
reg_alpha	0.5273
reg_lambda	0.517
scale_pos_weight	2.5829
subsample	0.8726



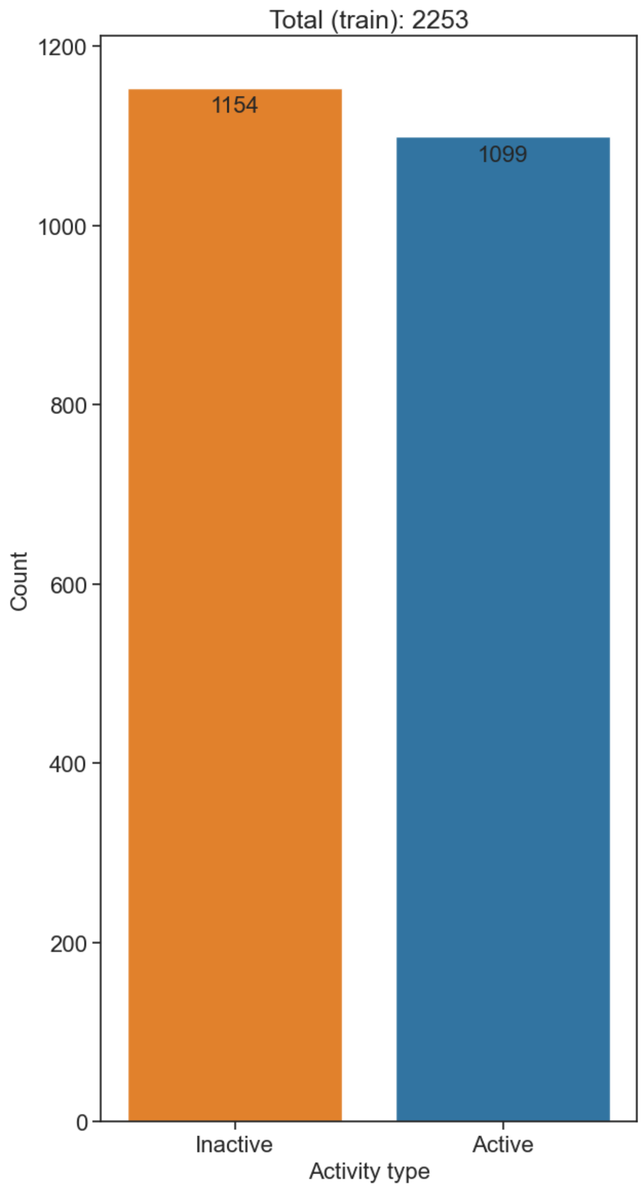


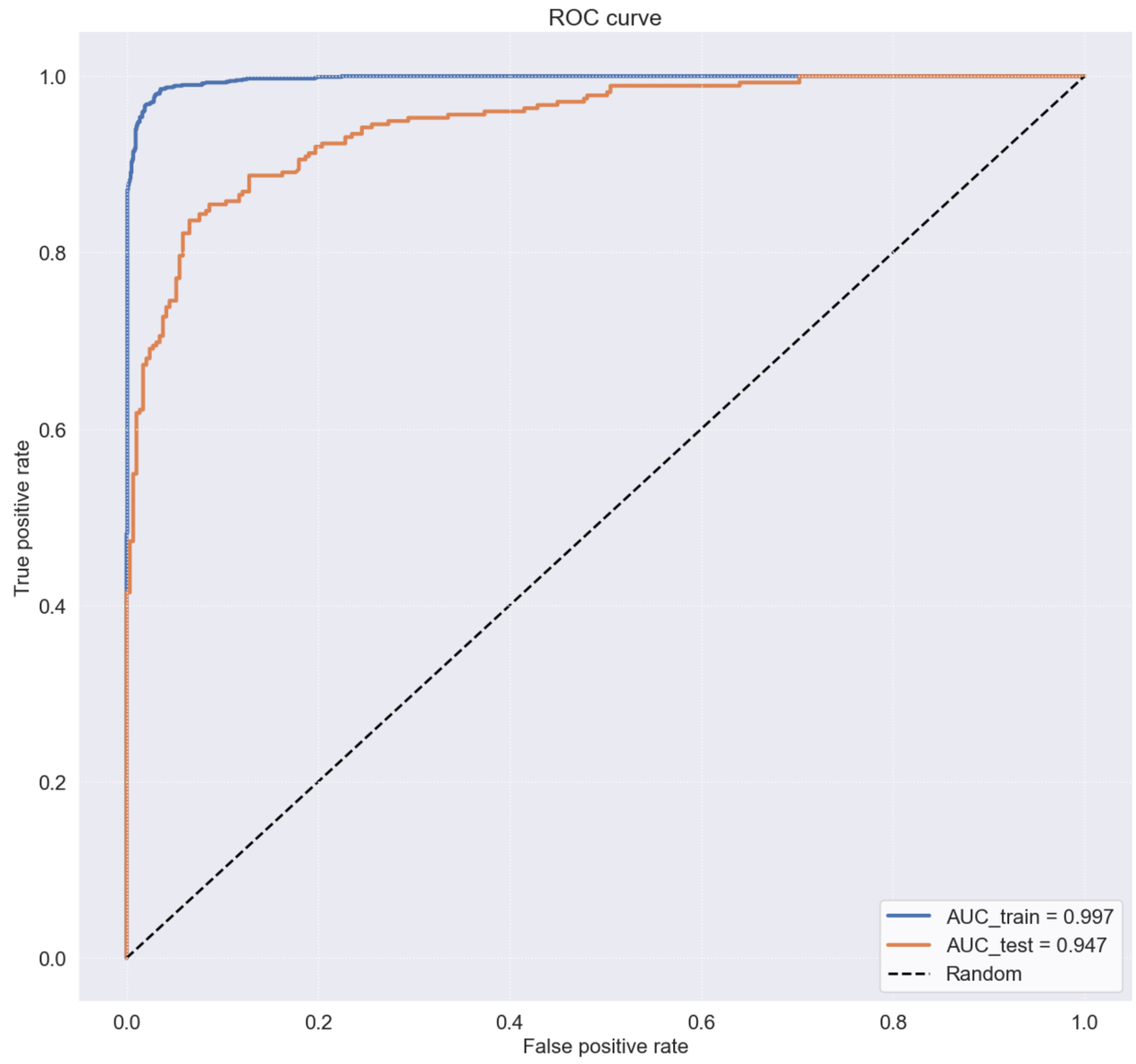


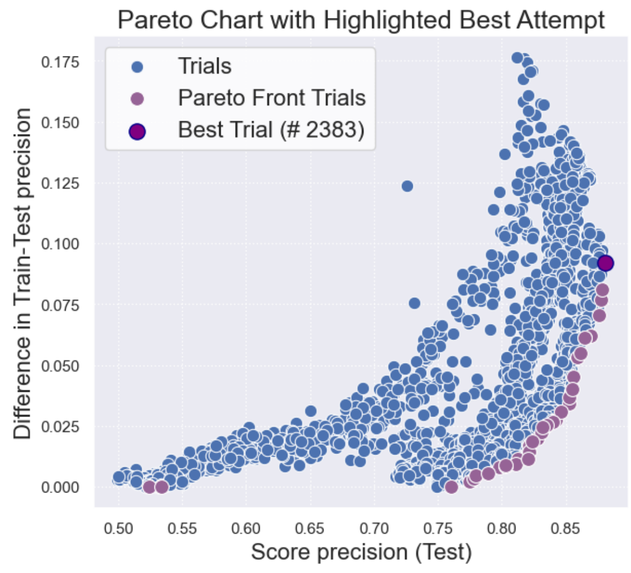


Metric	Train	Test
AUC	0.9996	0.9558
accuracy	0.9902	0.8812
balanced accuracy	0.9904	0.8821
recall_(sens)	0.9991	0.9164
specificity	0.9818	0.8478
precision	0.9812	0.8514
f1_score	0.9902	0.8812

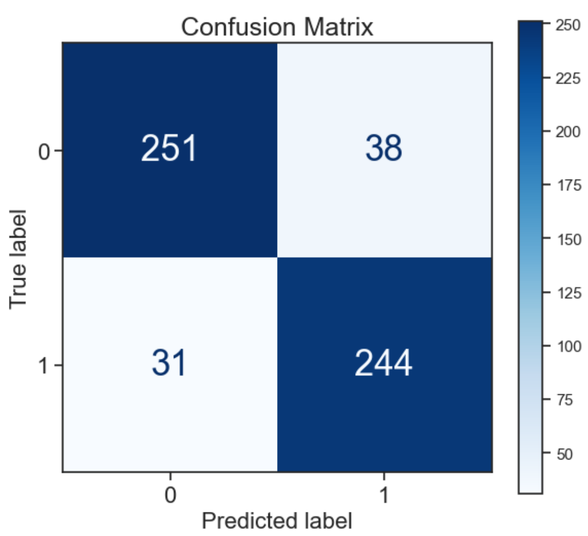
Protein: P50406 - metric: precision

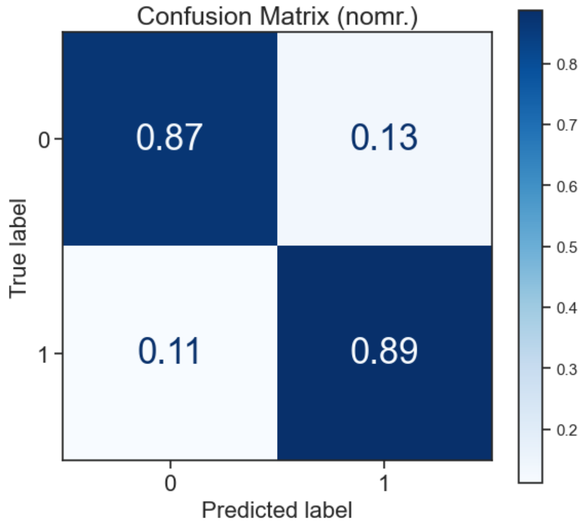


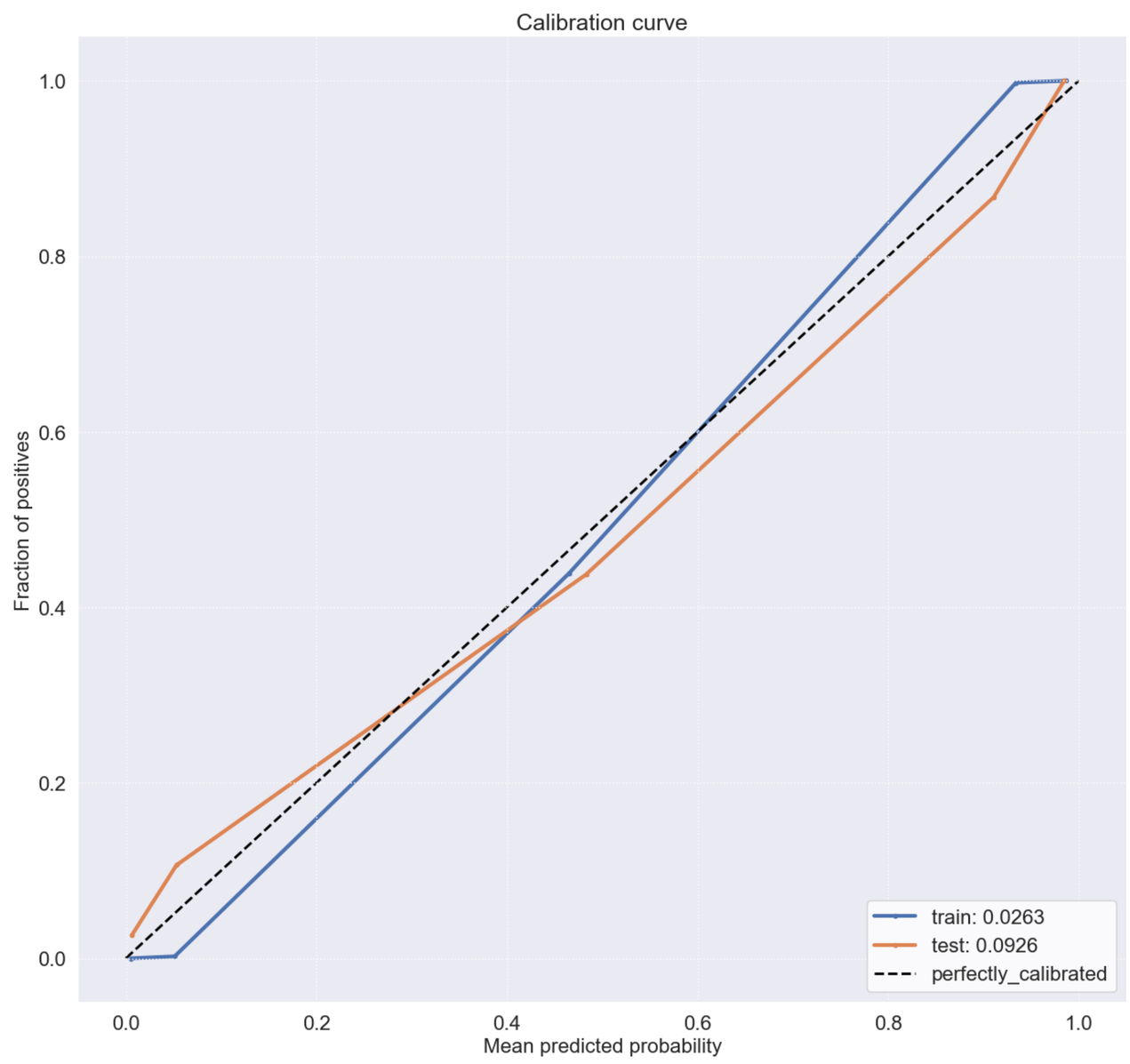


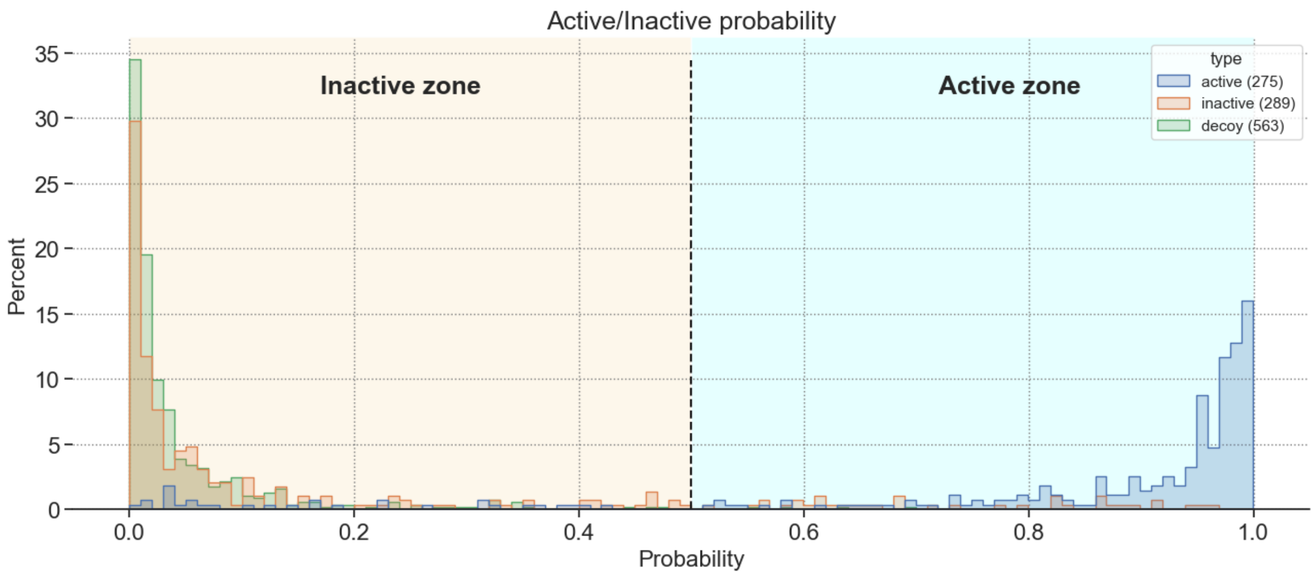


XGBoost Parameters	Value
alpha	4.8015
colsample_bytree	0.9801
gamma	0.2199
lambda	0.3479
learning_rate	0.0305
max_depth	6.0
min_child_weight	3.0
n_estimators	936.0
reg_alpha	0.1438
reg_lambda	0.5345
scale_pos_weight	1.0285
subsample	0.7246



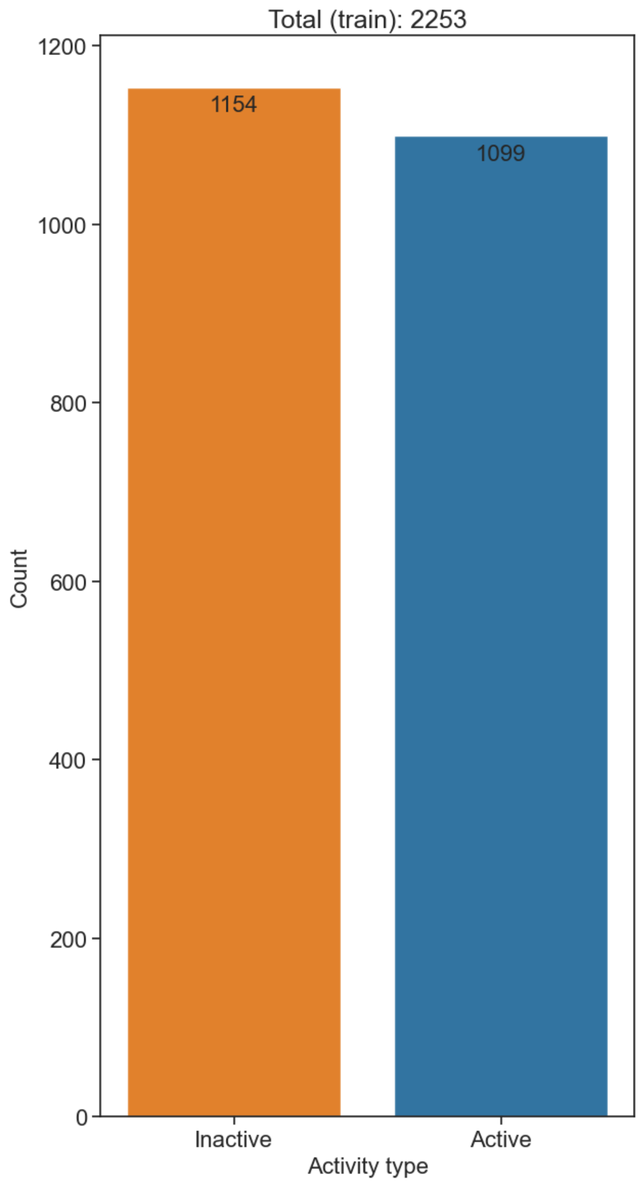


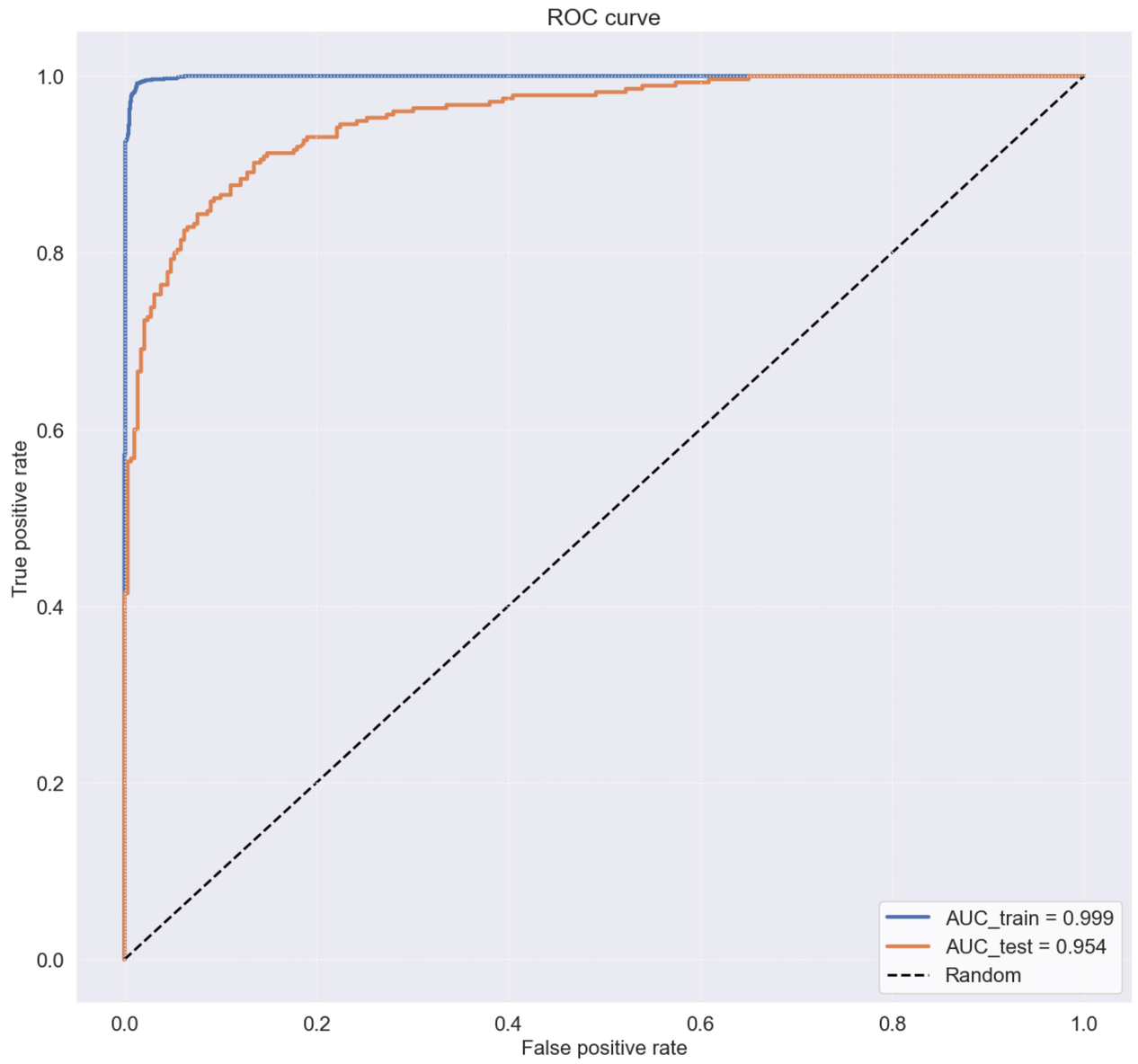


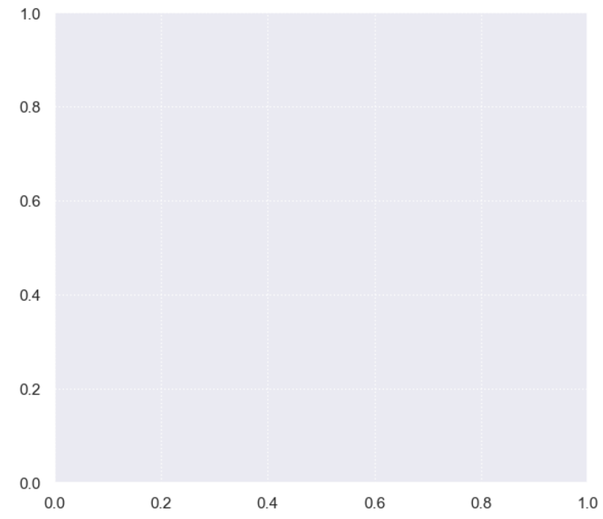


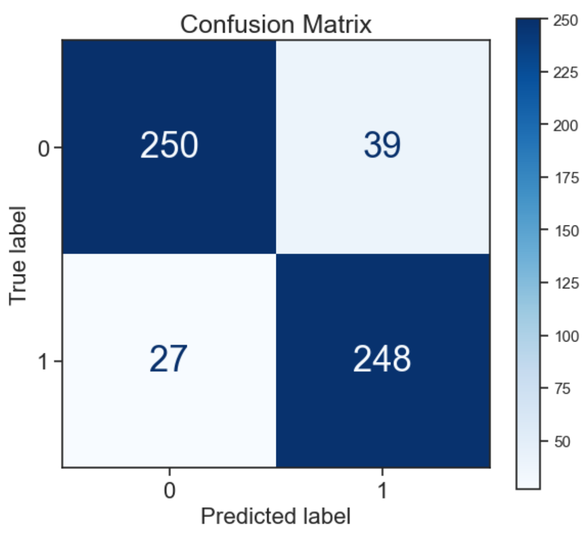
Metric	Train	Test
AUC	0.9967	0.9467
accuracy	0.9734	0.8777
balanced accuracy	0.9734	0.8779
recall_(sens)	0.9763	0.8873
specificity	0.9705	0.8685
precision	0.9693	0.8652
f1_score	0.9734	0.8777

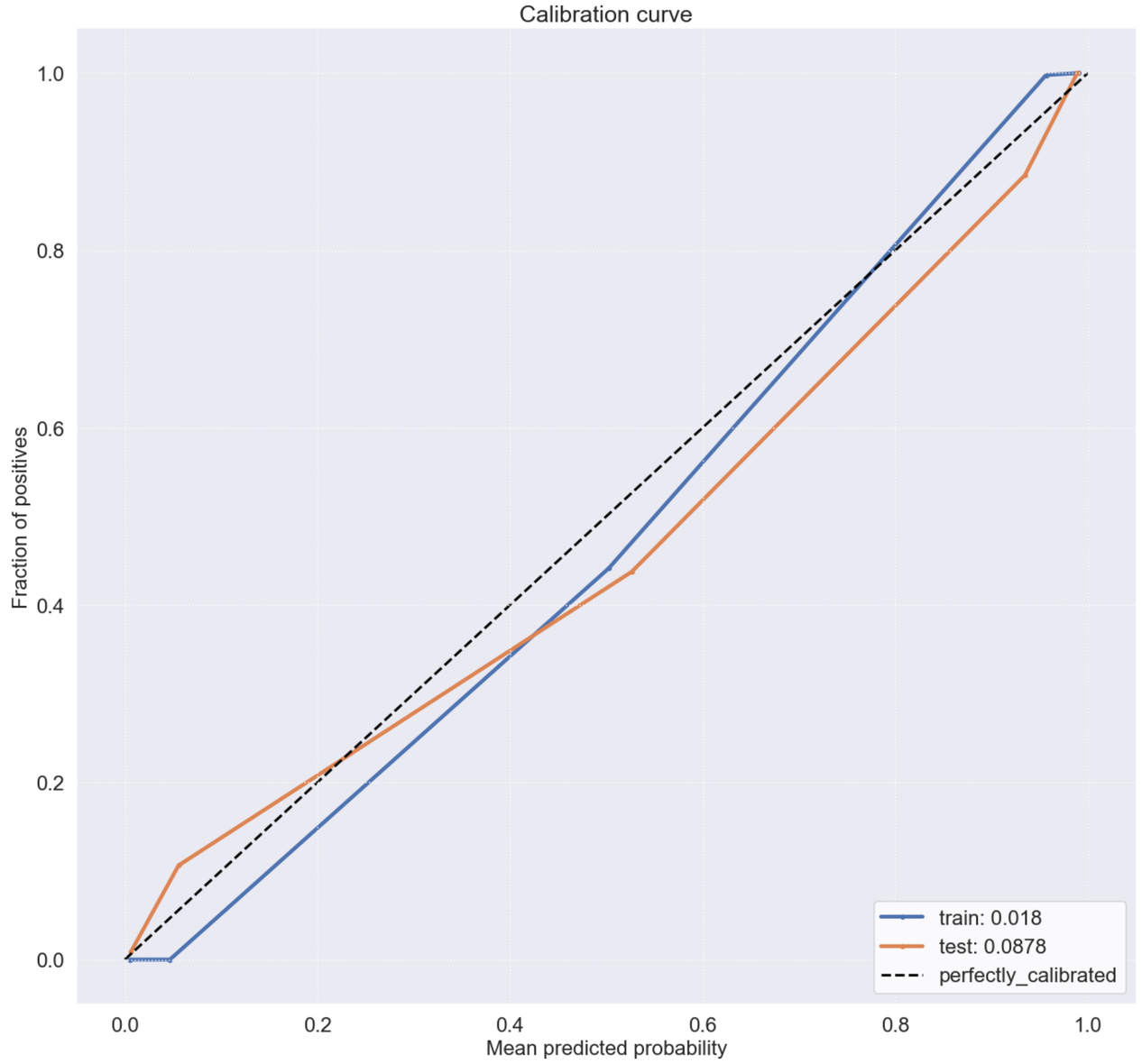
Protein: P50406 - metric: SoftVotingXGBoostEnsemble

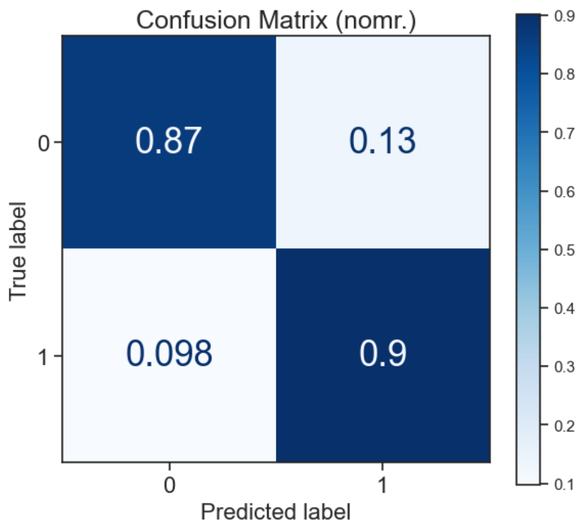


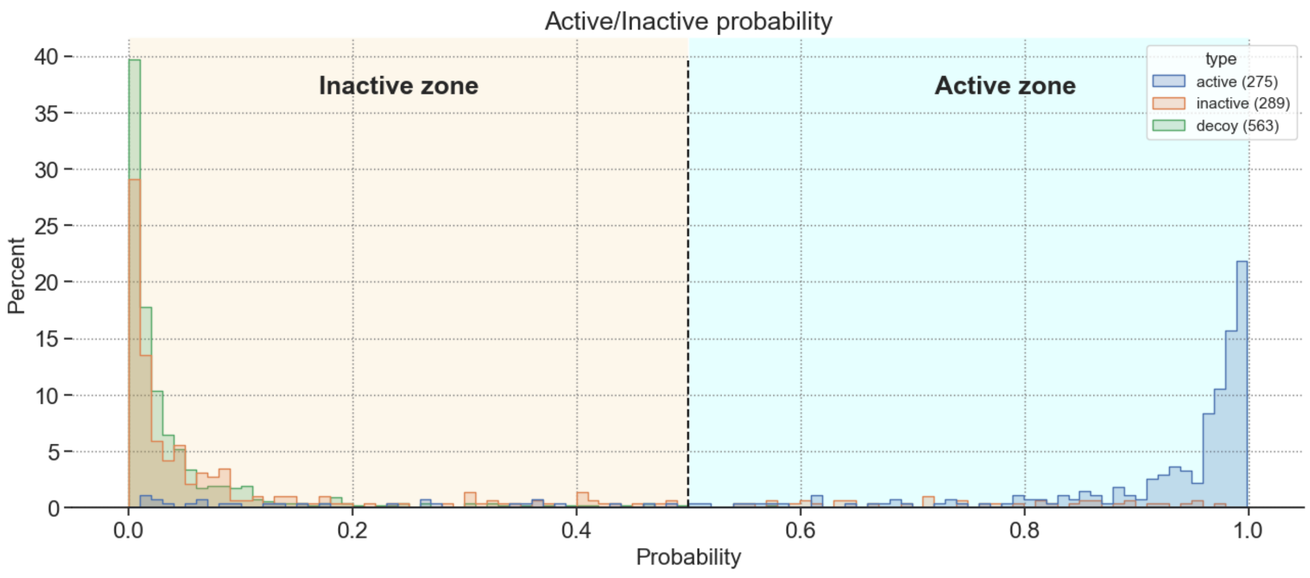












Metric	Train	Test
AUC	0.999	0.9539
accuracy	0.9849	0.883
balanced accuracy	0.9852	0.8834
recall_(sens)	0.9955	0.9018
specificity	0.9749	0.8651
precision	0.9742	0.8641
f1_score	0.9849	0.883