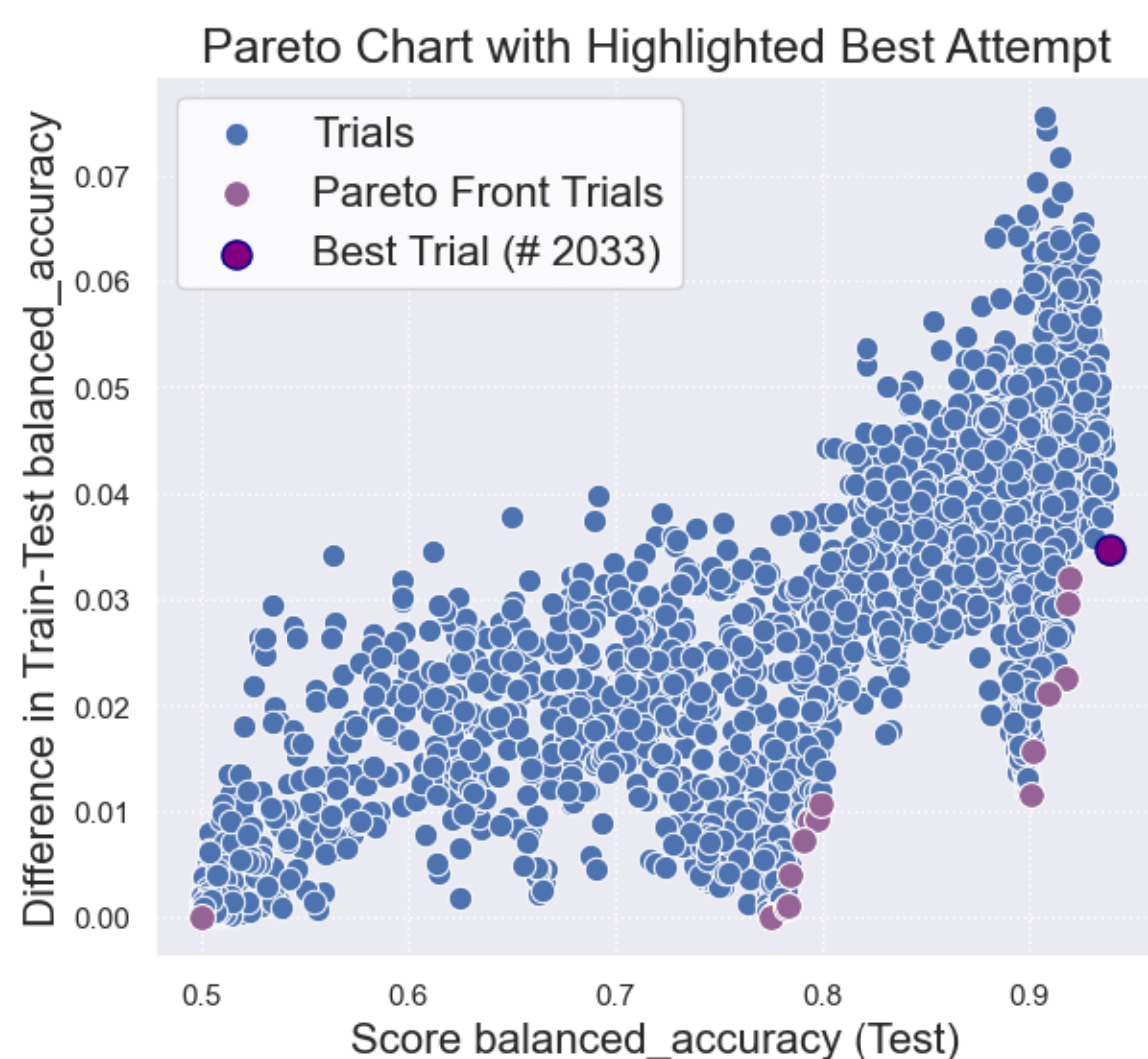
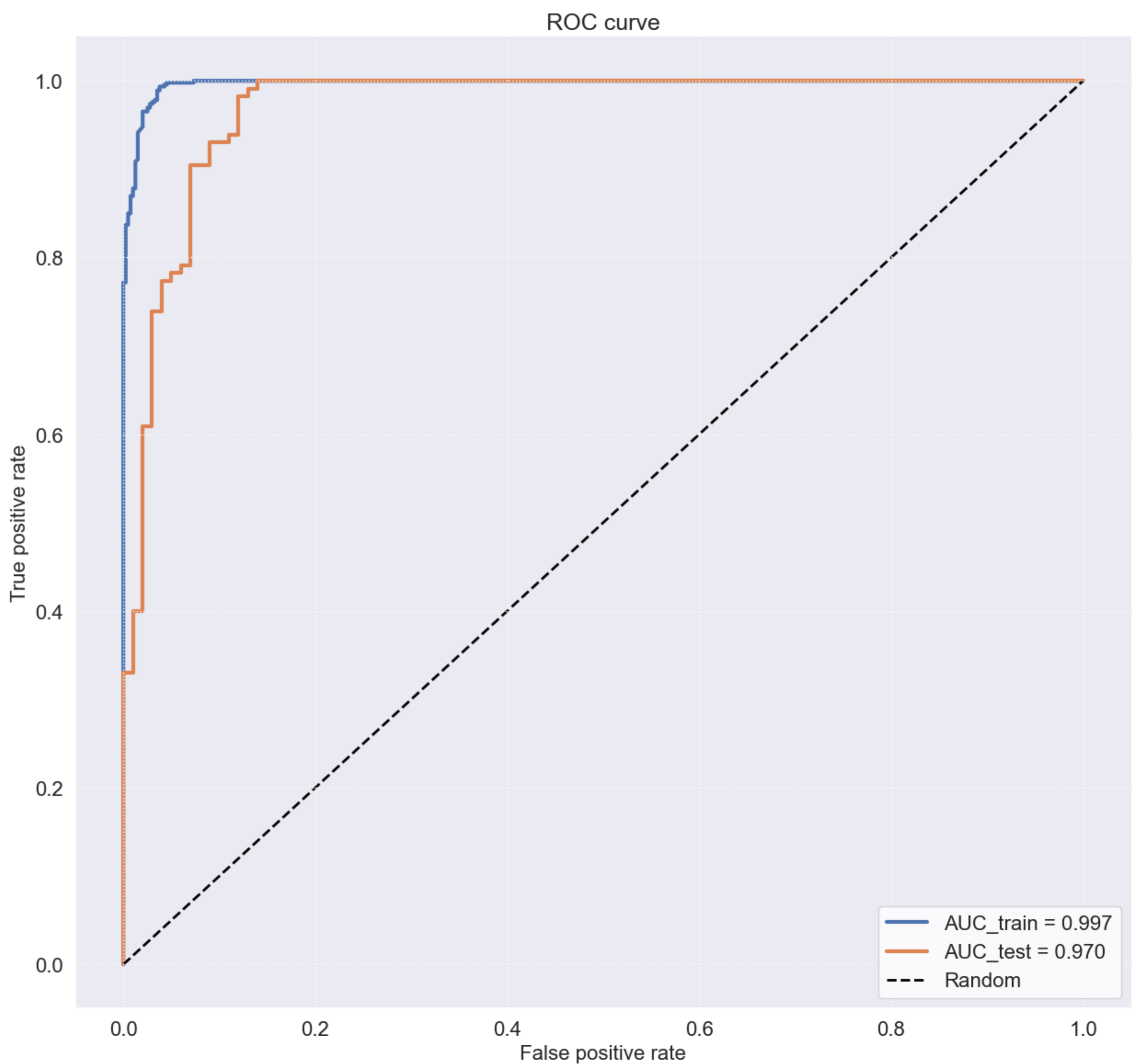
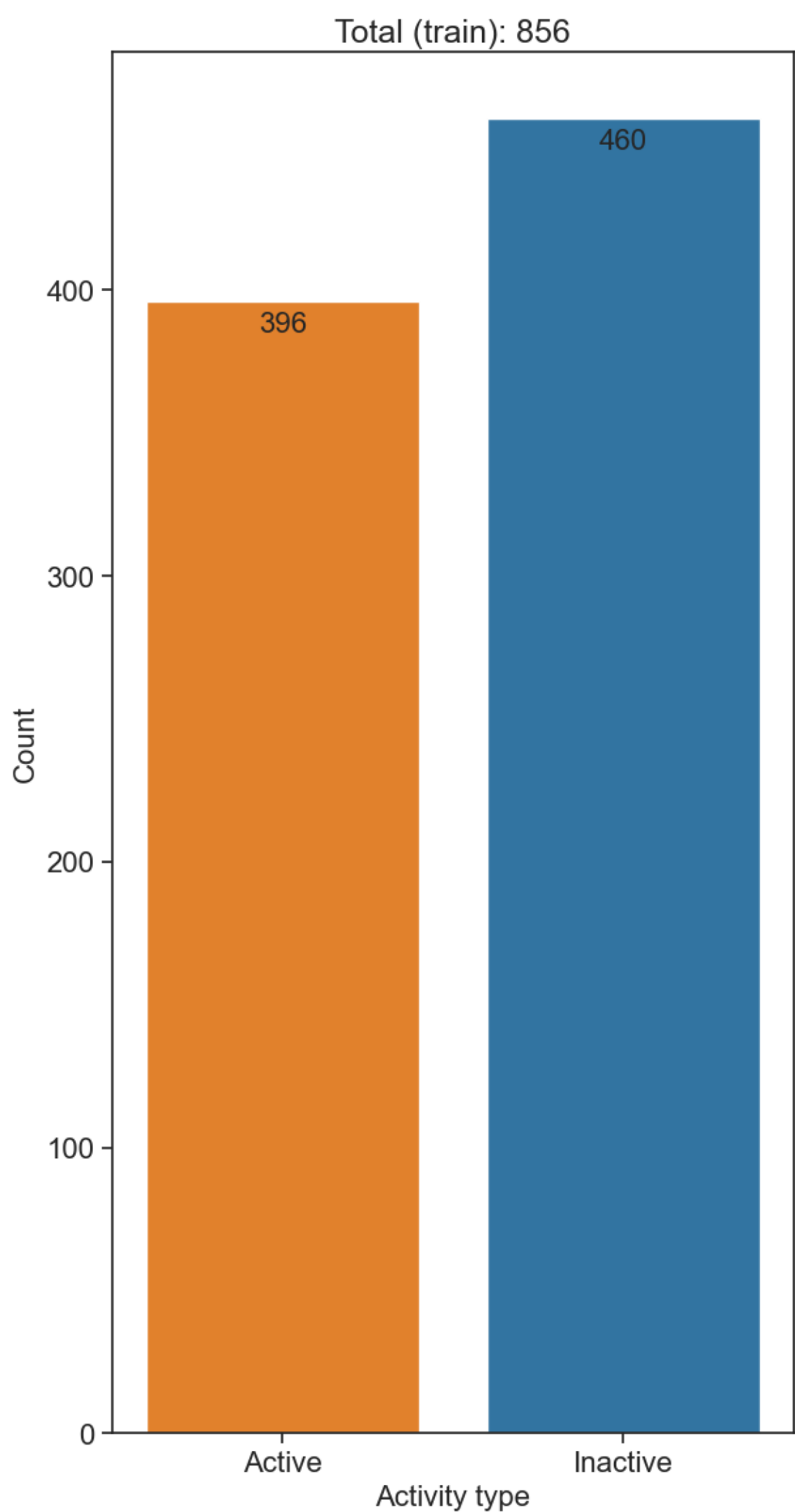
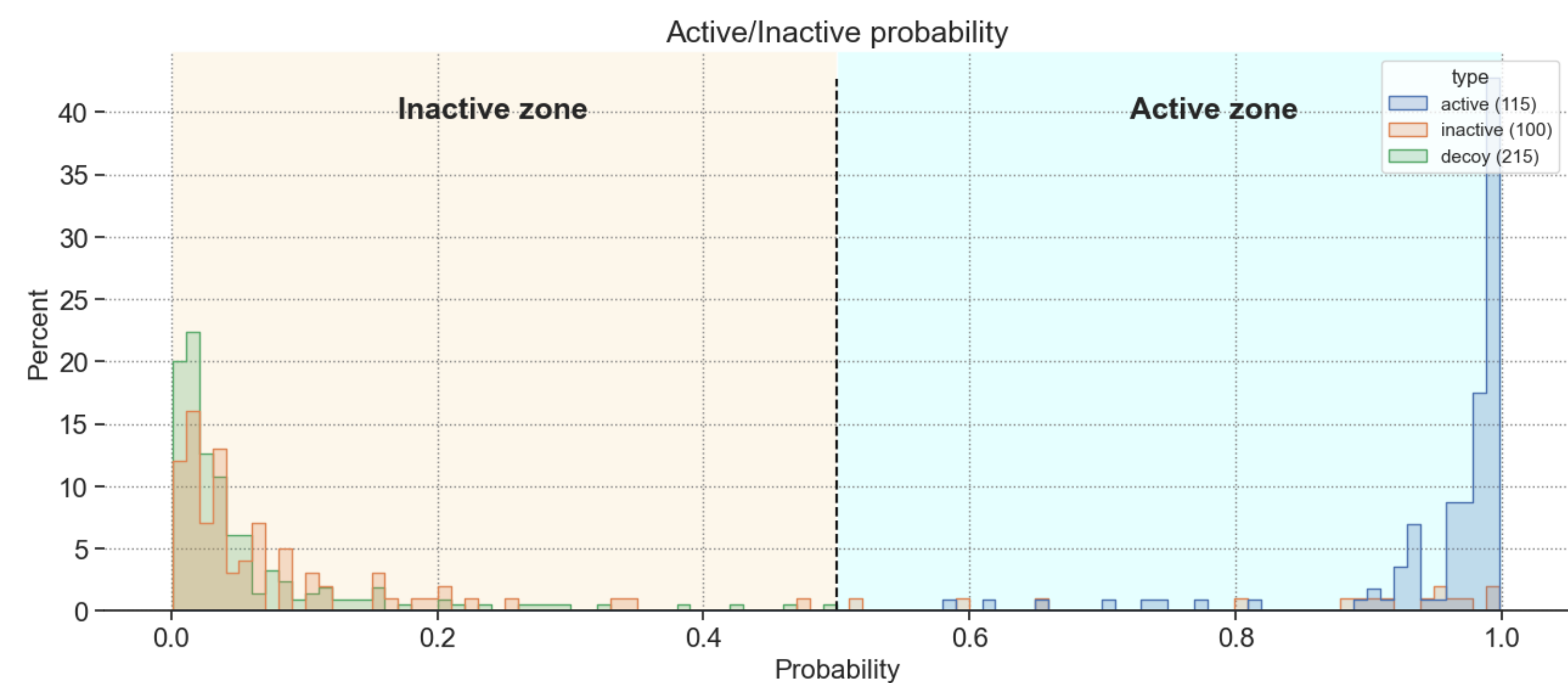
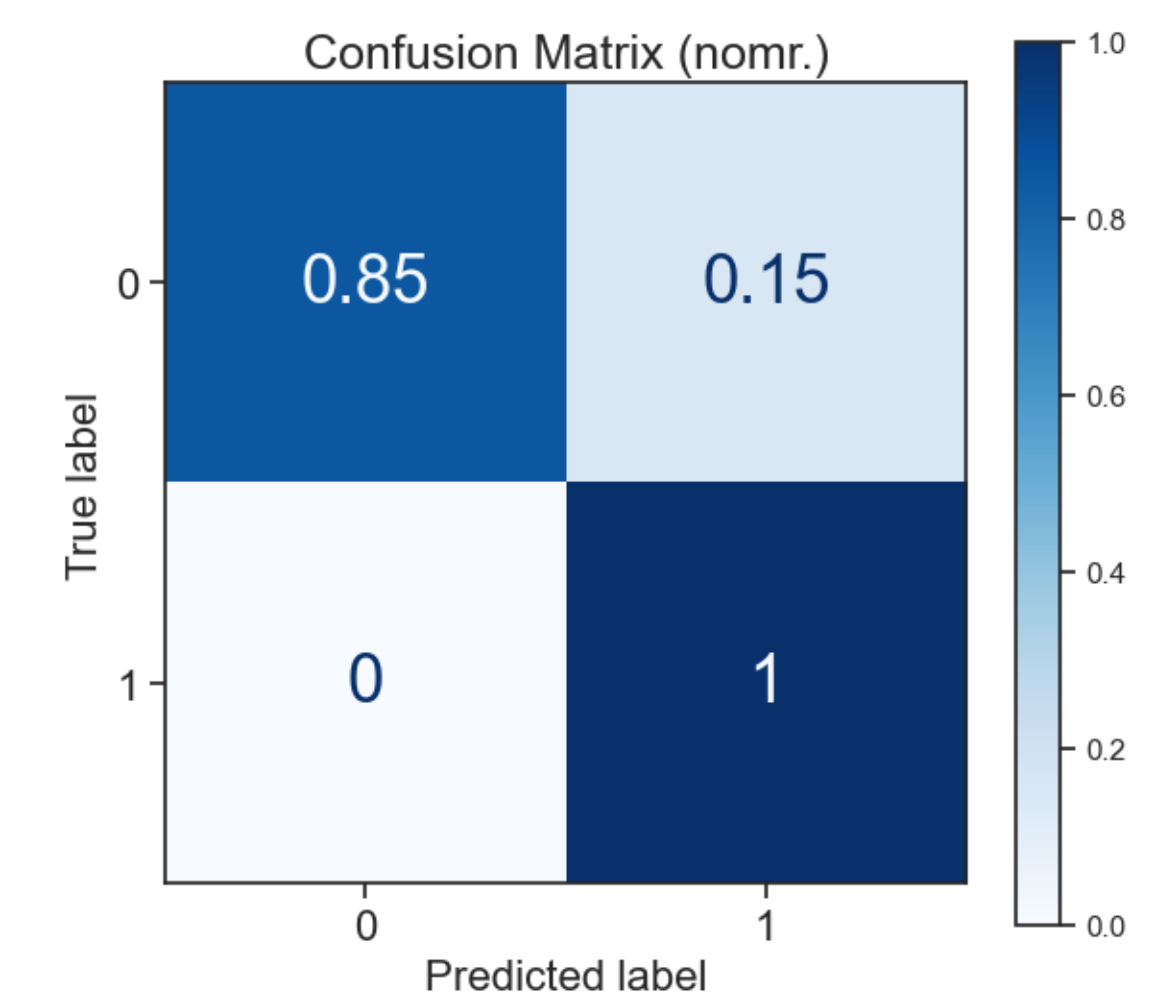
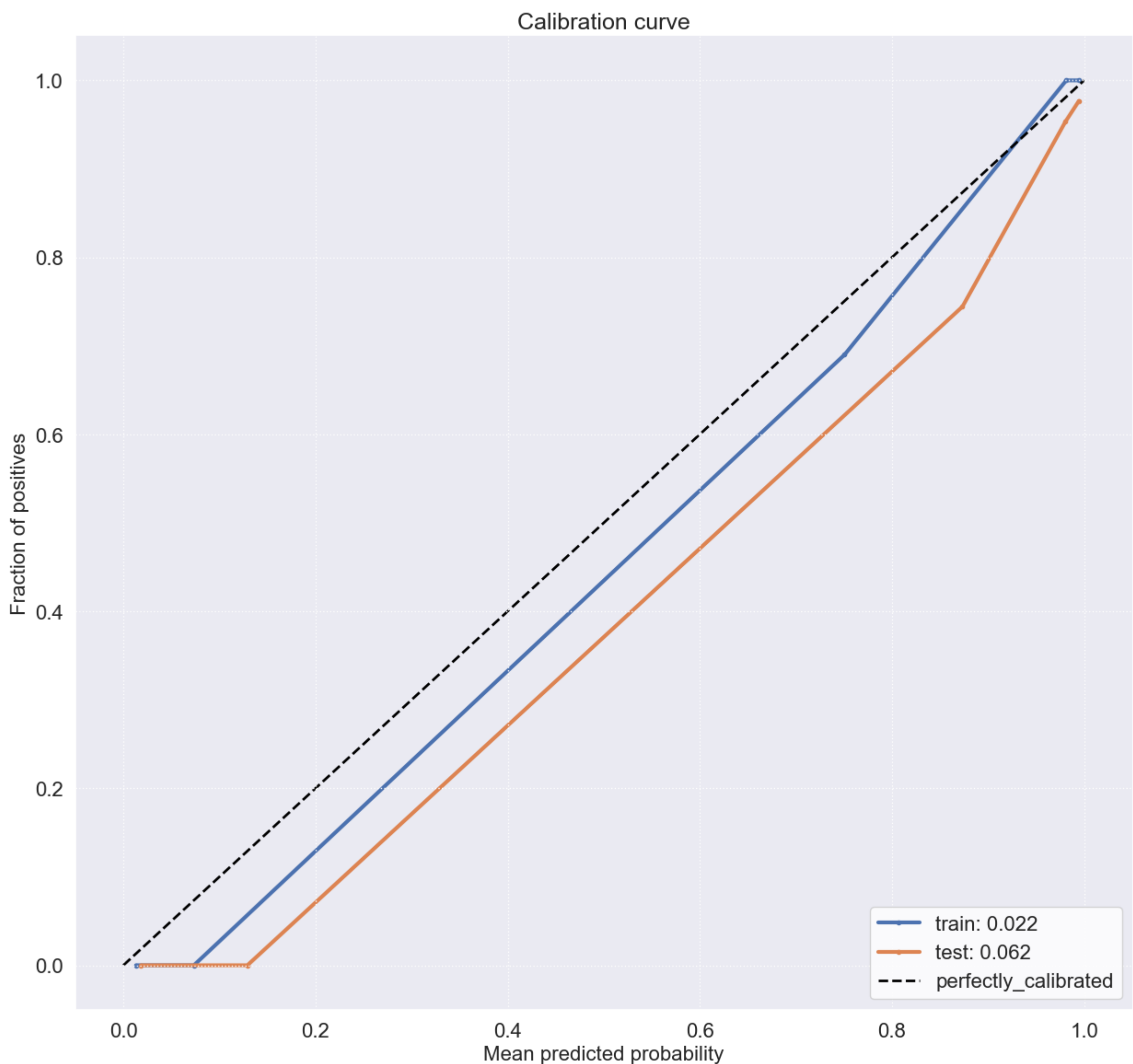
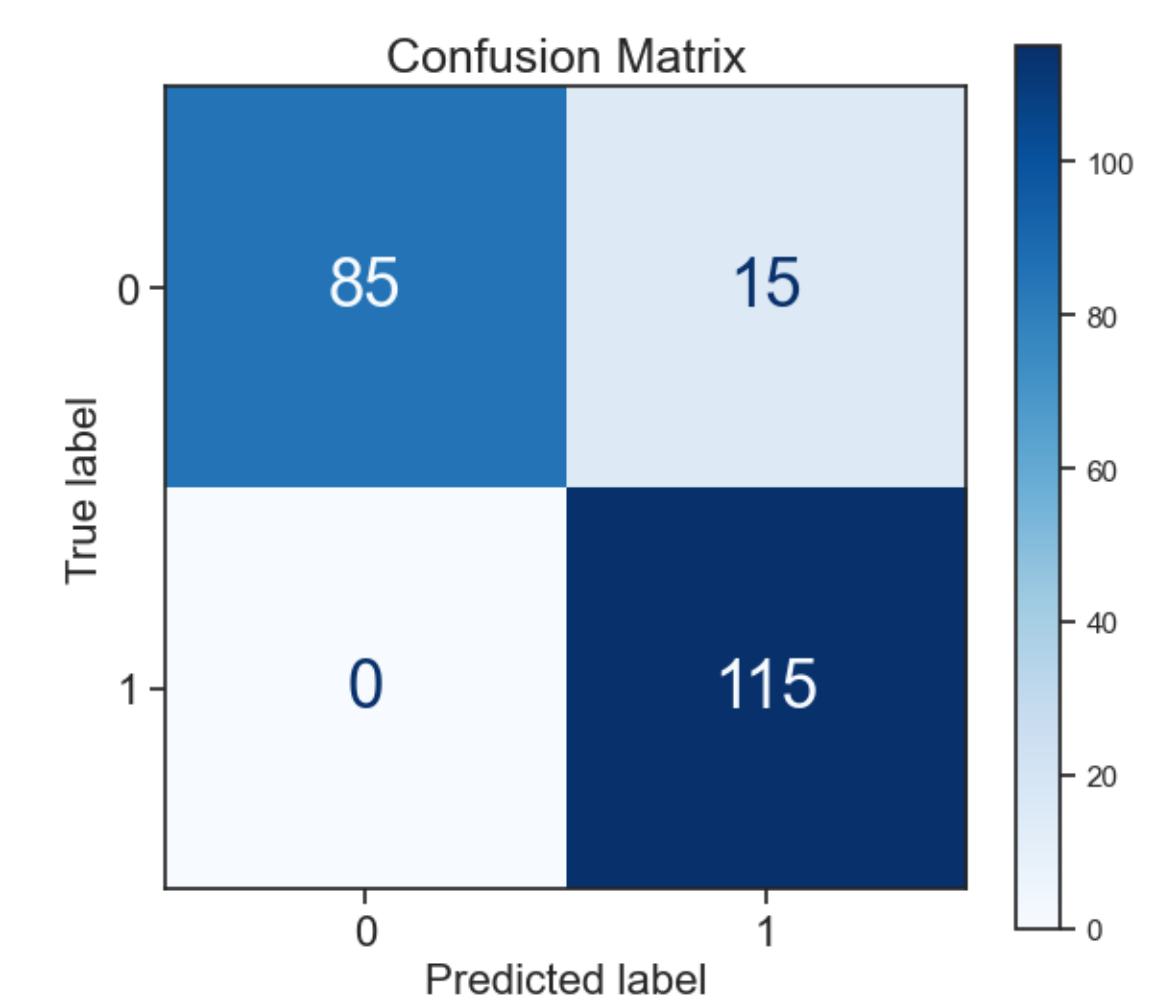


Protein: P31639 - metric: balanced_accuracy

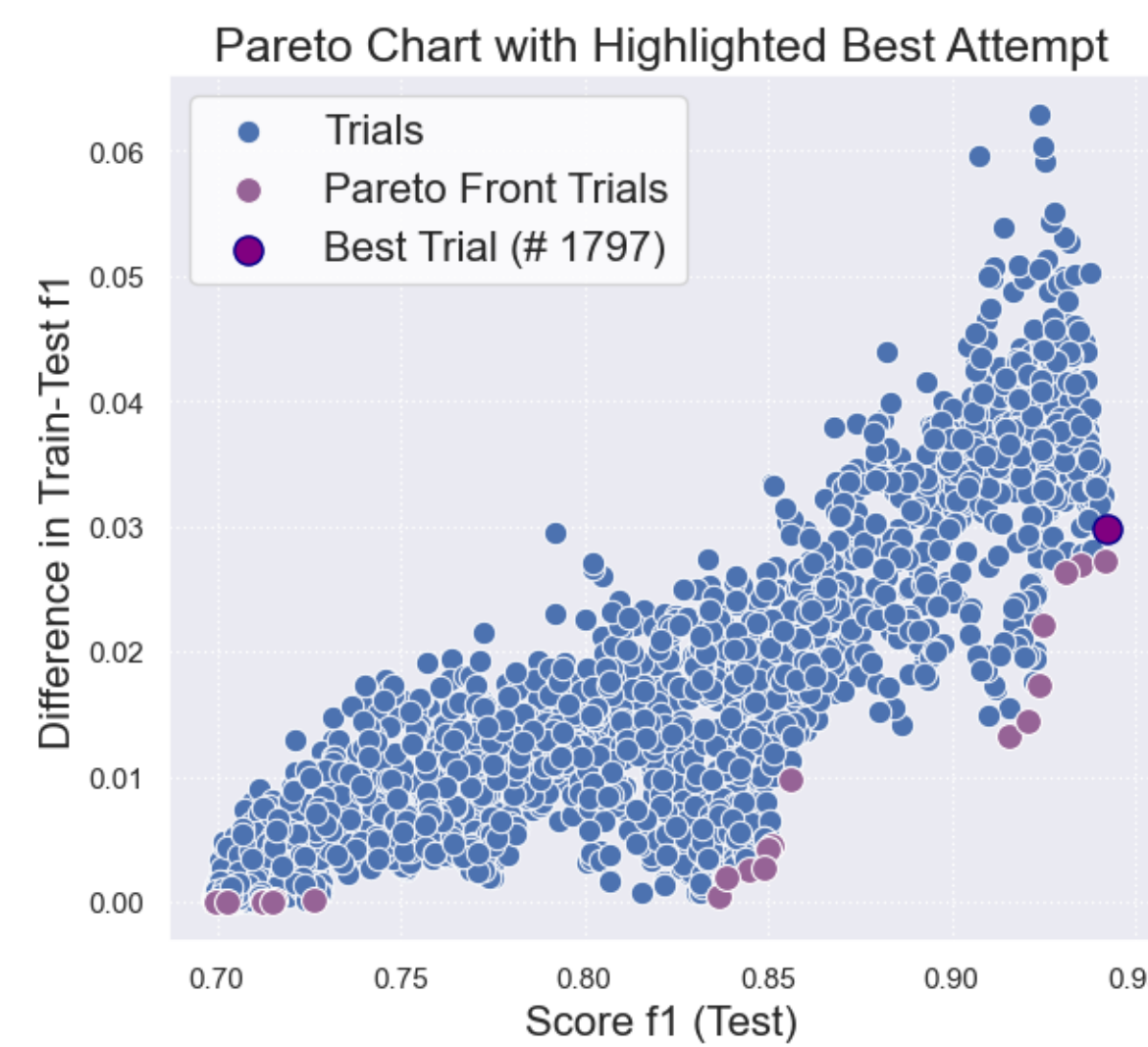
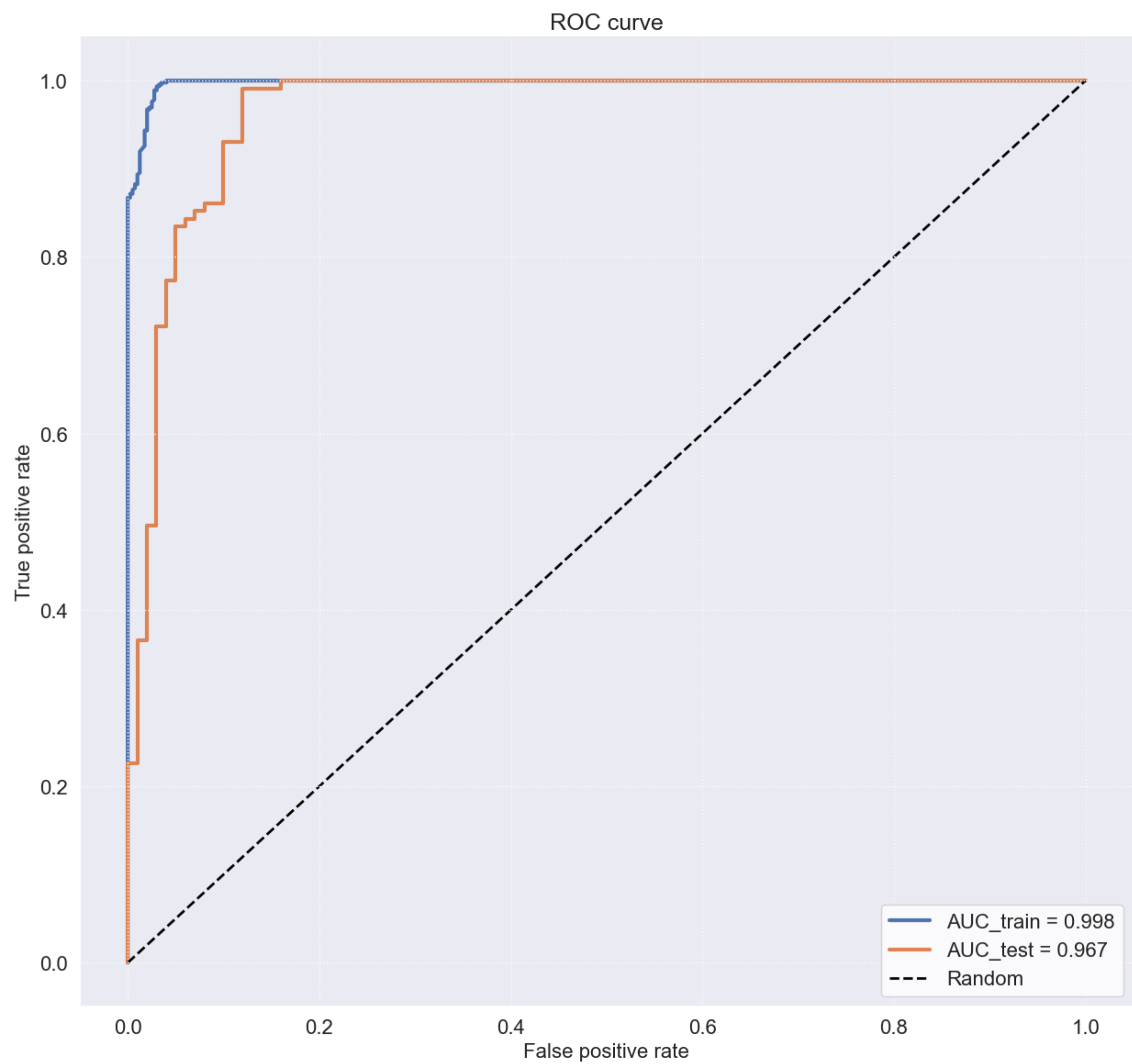
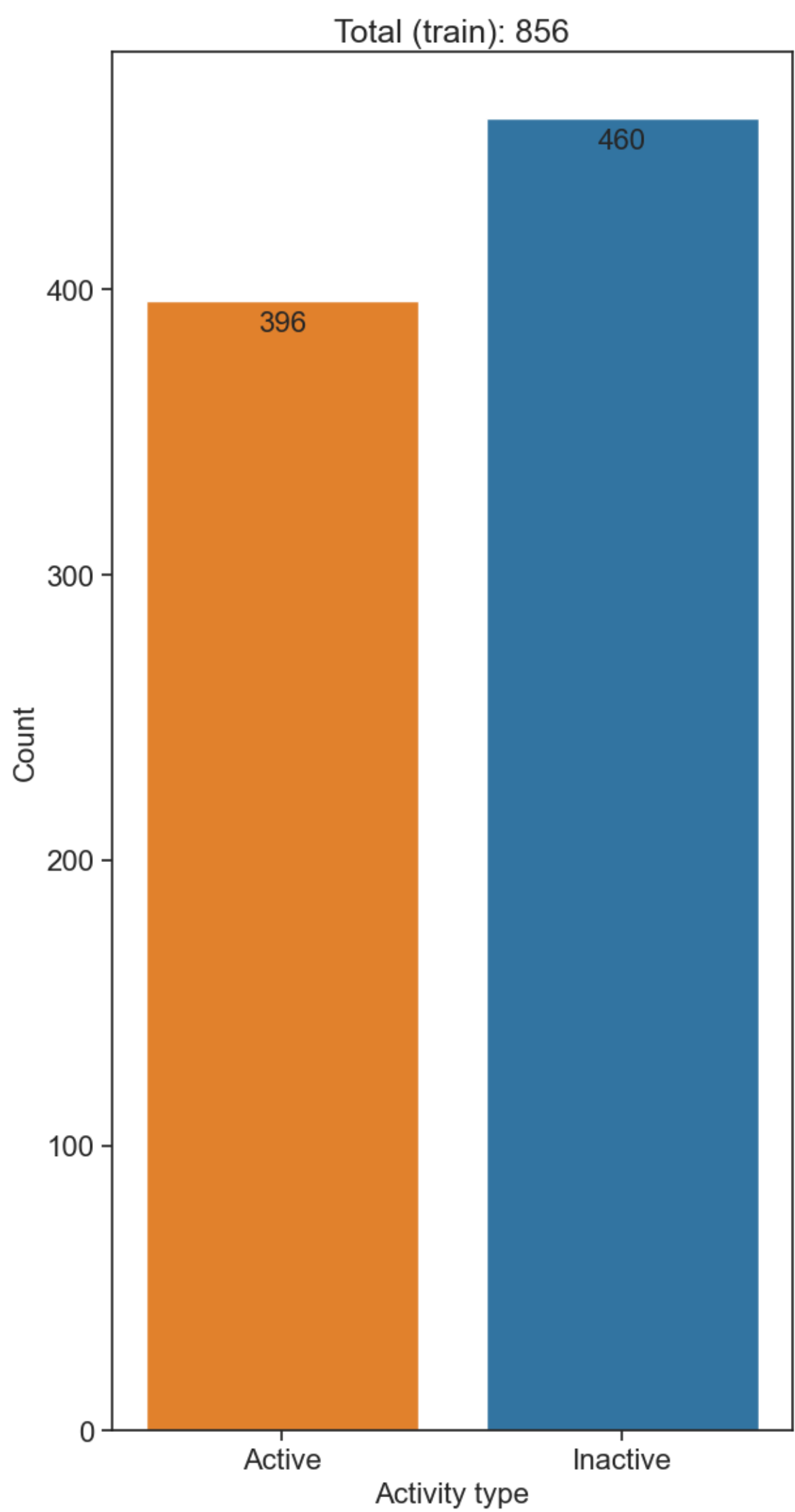


XGBoost Parameters	Value
alpha	4.6957
colsample_bytree	0.6118
gamma	0.7692
lambda	4.2774
learning_rate	0.0581
max_depth	9.0
min_child_weight	1.0
n_estimators	563.0
reg_alpha	0.8197
reg_lambda	0.735
scale_pos_weight	2.2383
subsample	0.6699

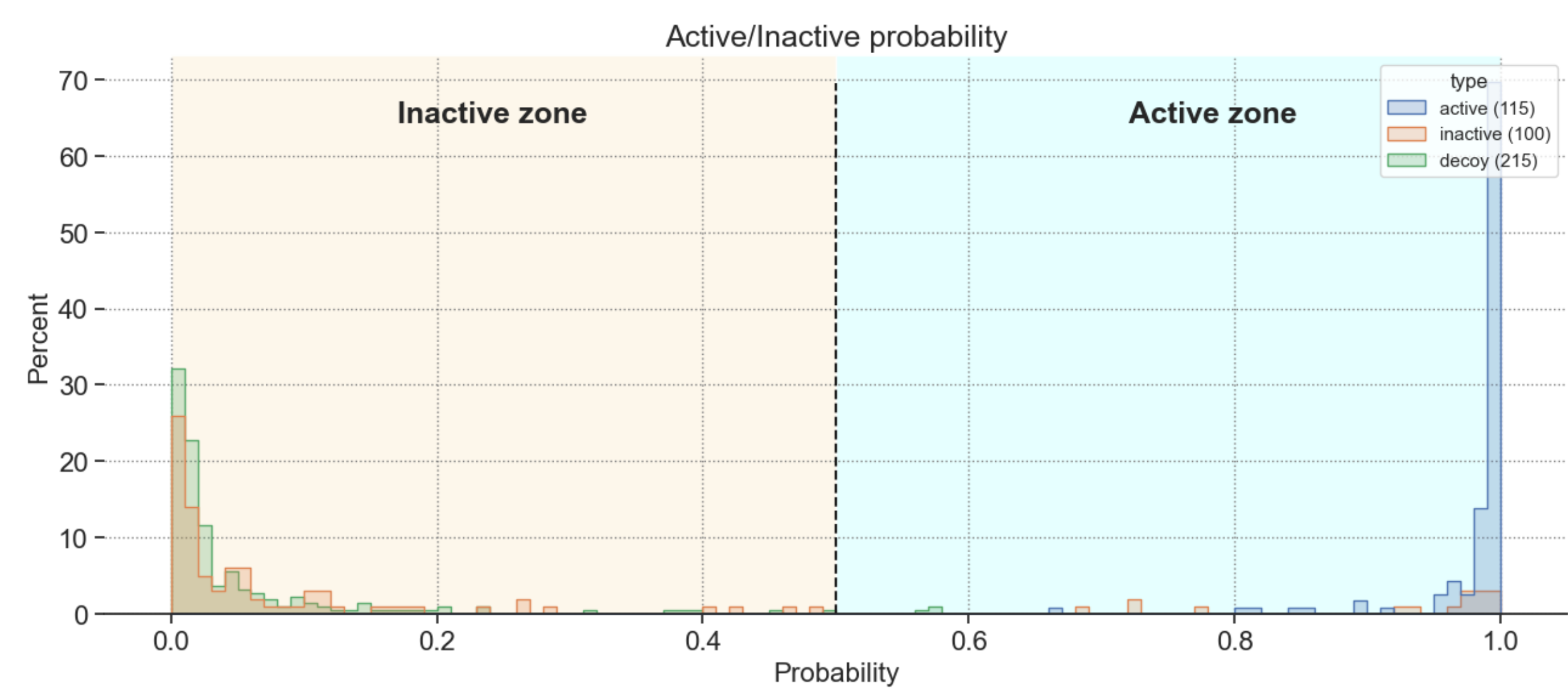
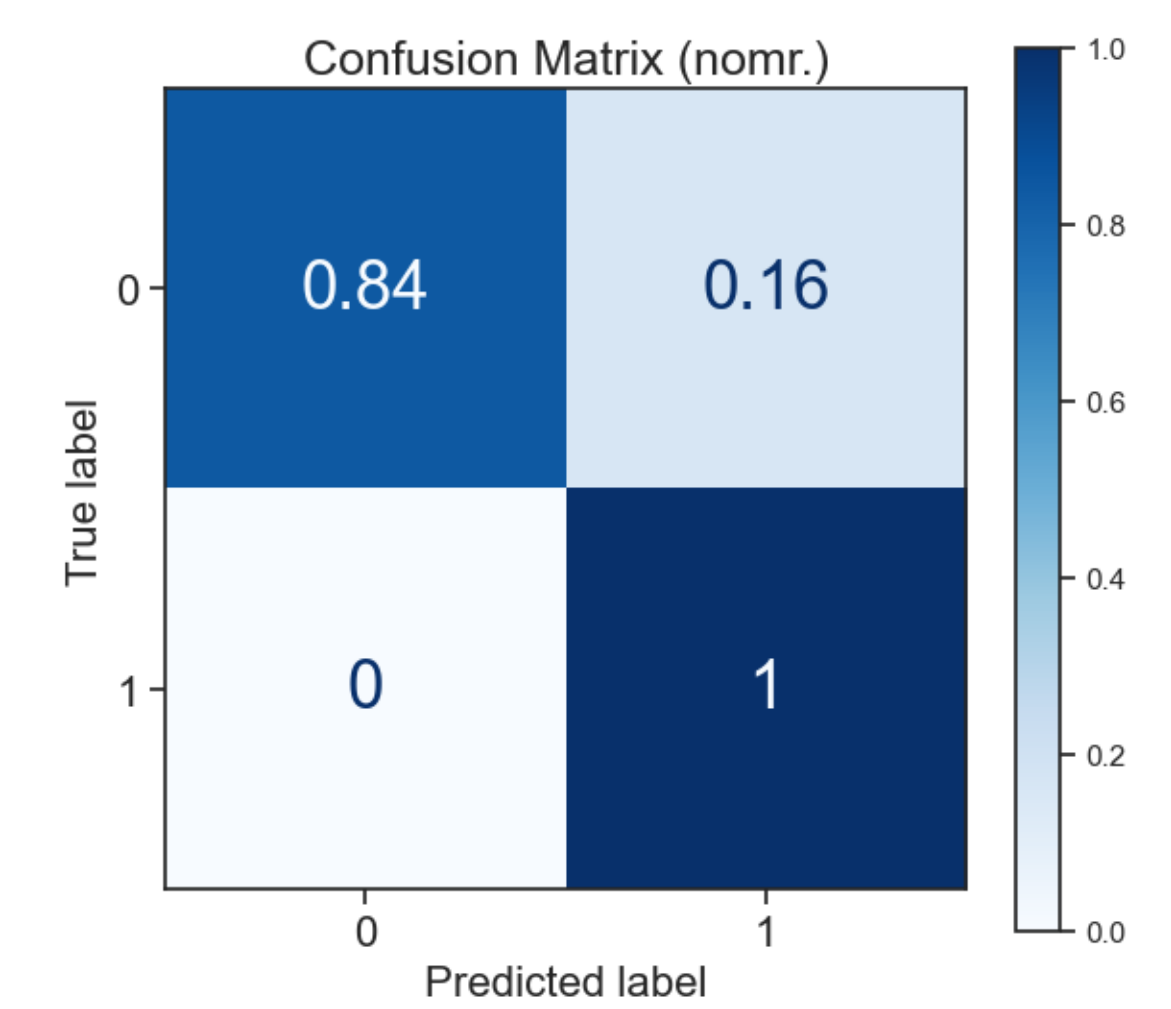
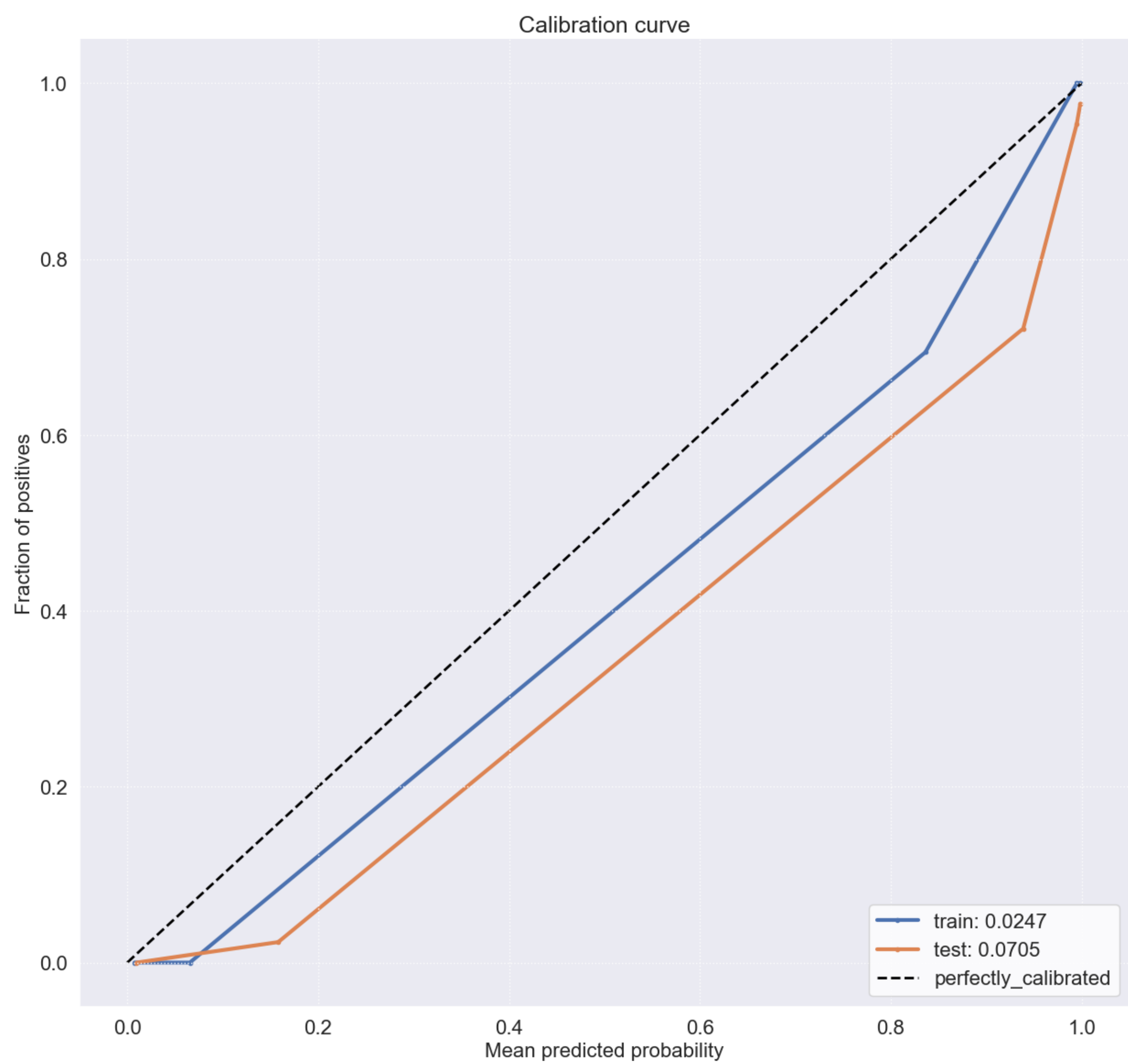
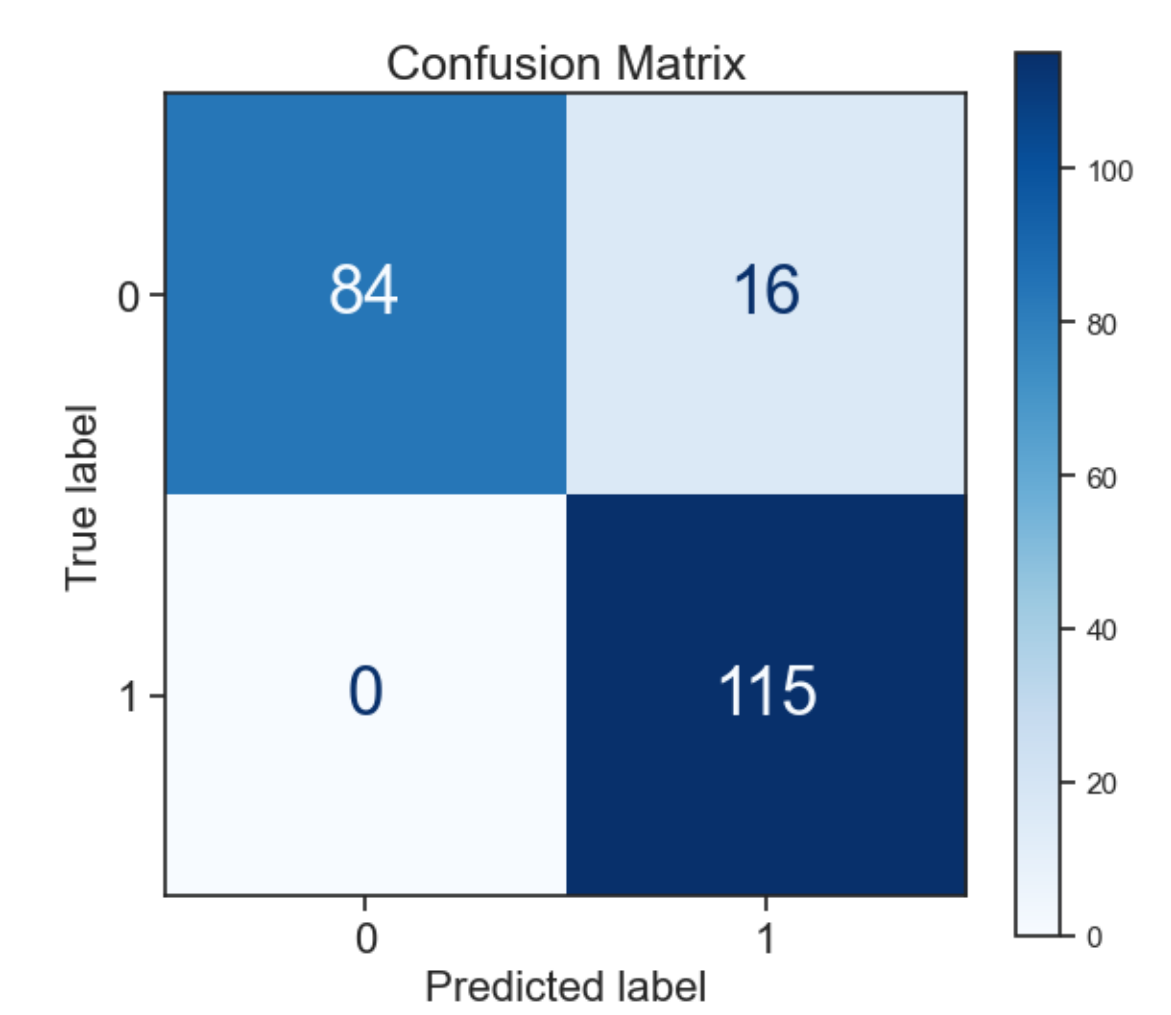


Metric	Train	Test
AUC	0.9969	0.9701
accuracy	0.9778	0.9302
balanced accuracy	0.9762	0.925
recall_(sens)	0.9978	1.0
specificity	0.9545	0.85
precision	0.9623	0.8846
f1_score	0.9778	0.9295

Protein: P31639 - metric: f1

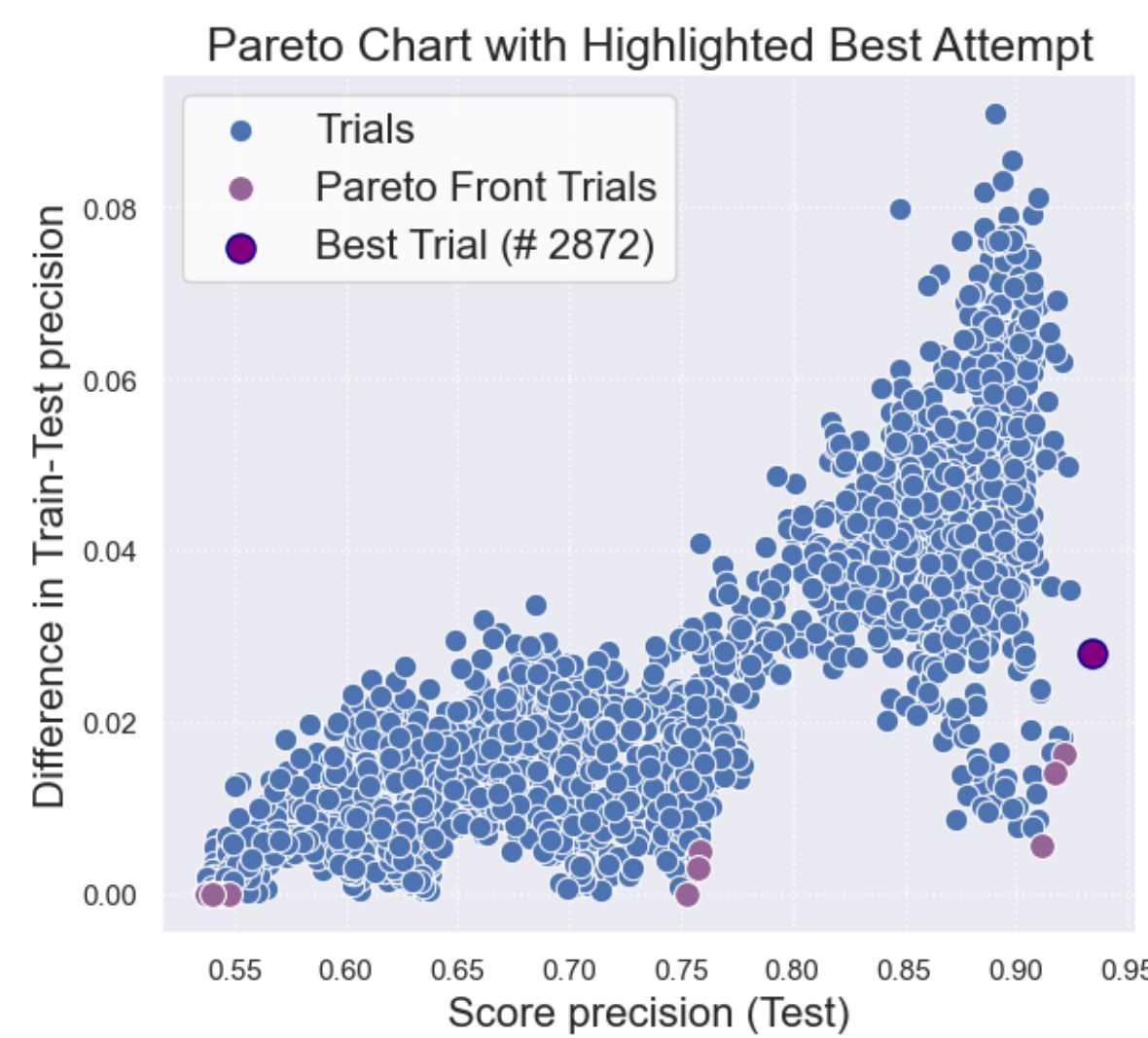
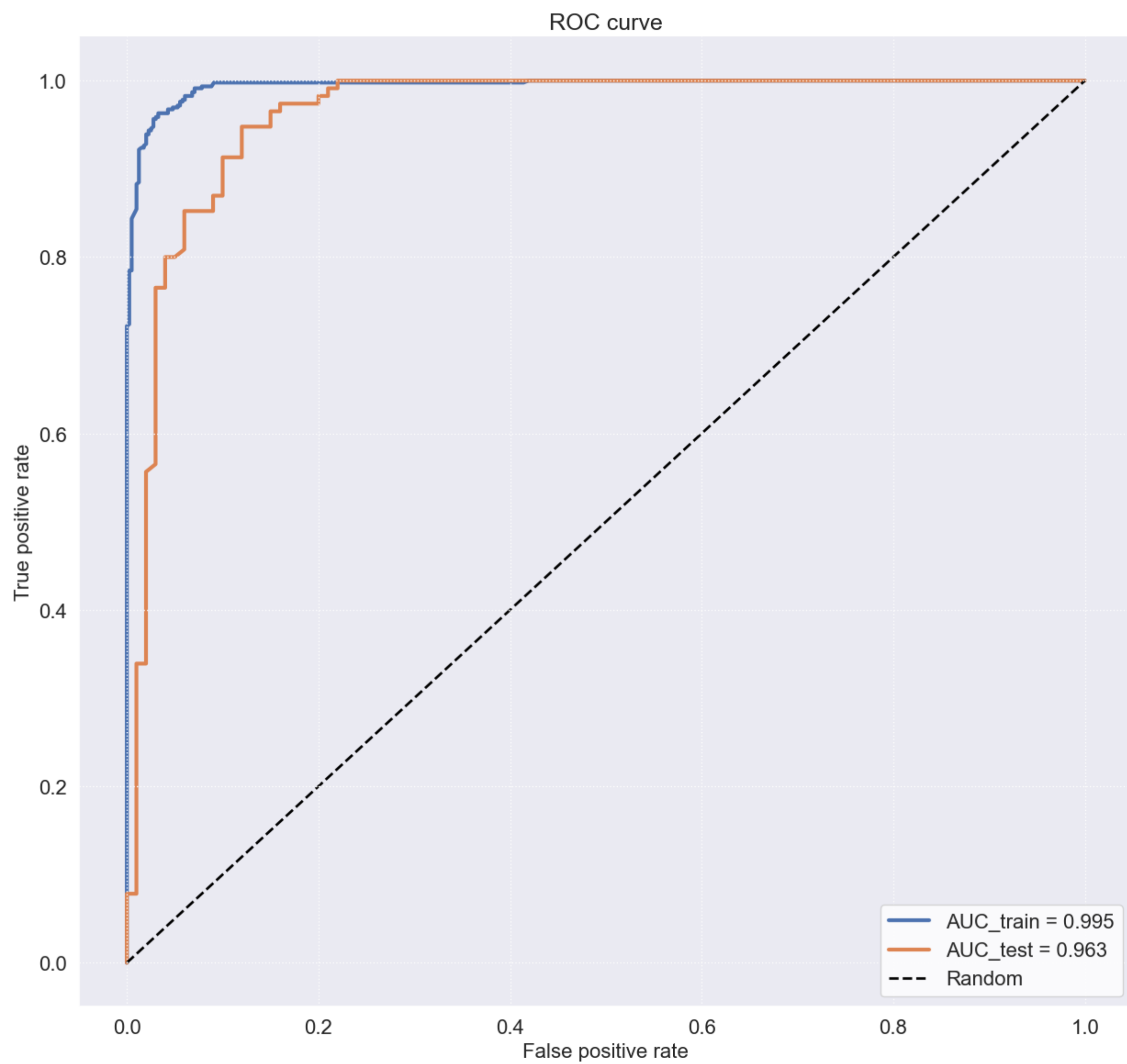
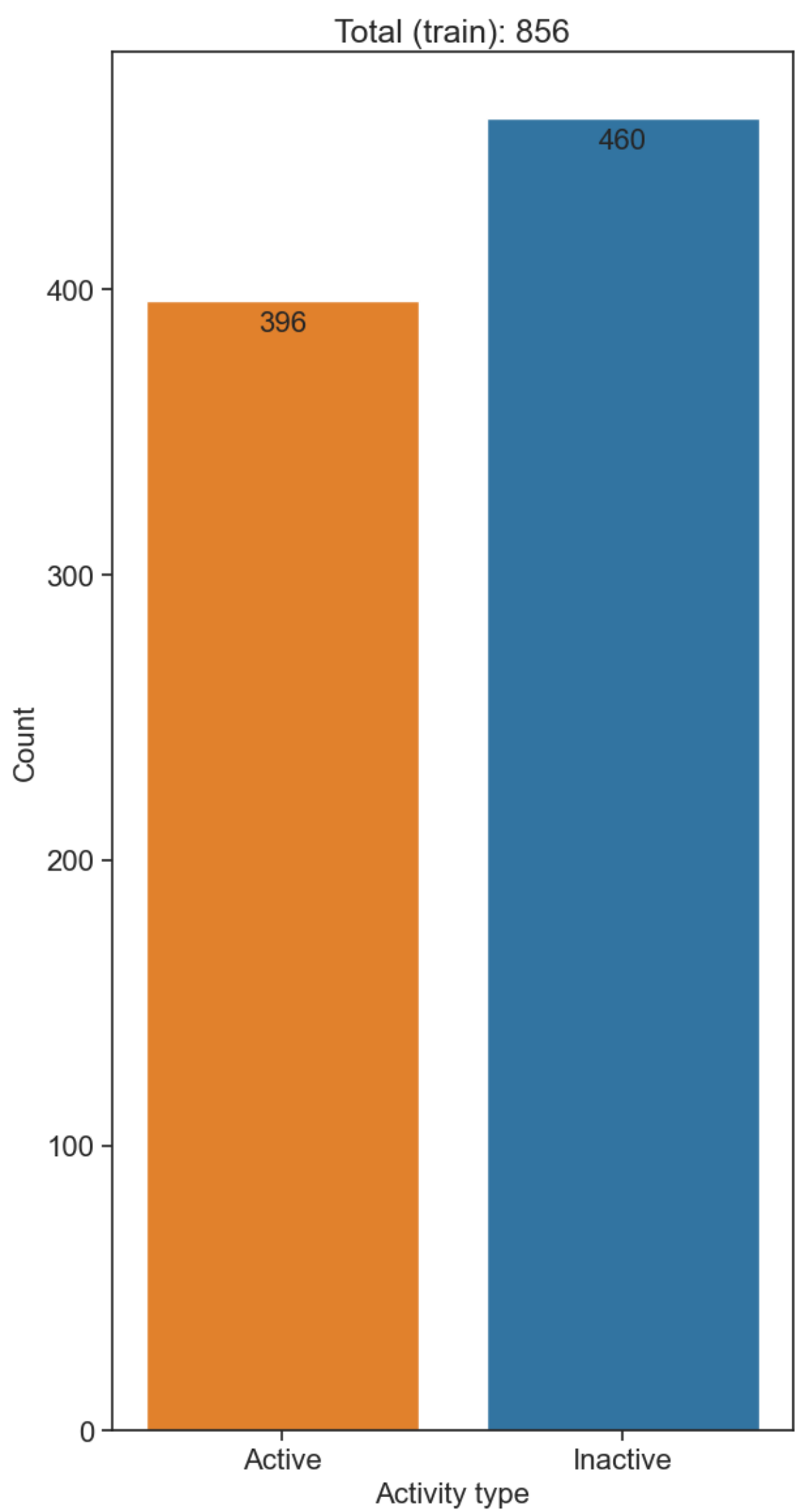


XGBoost Parameters	Value
alpha	2.8385
colsample_bytree	0.8336
gamma	0.6683
lambda	1.7017
learning_rate	0.0373
max_depth	9.0
min_child_weight	3.0
n_estimators	496.0
reg_alpha	0.1226
reg_lambda	0.0022
scale_pos_weight	7.5107
subsample	0.9116

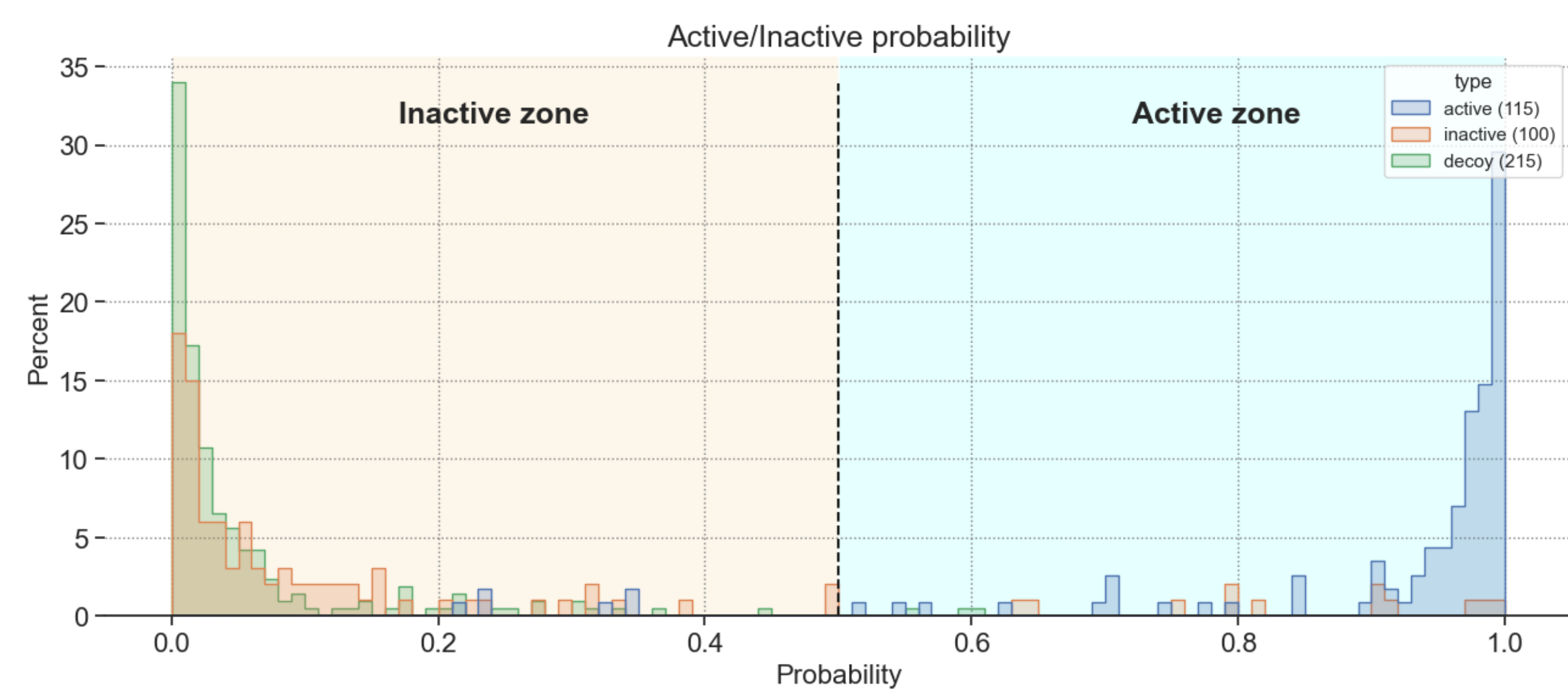
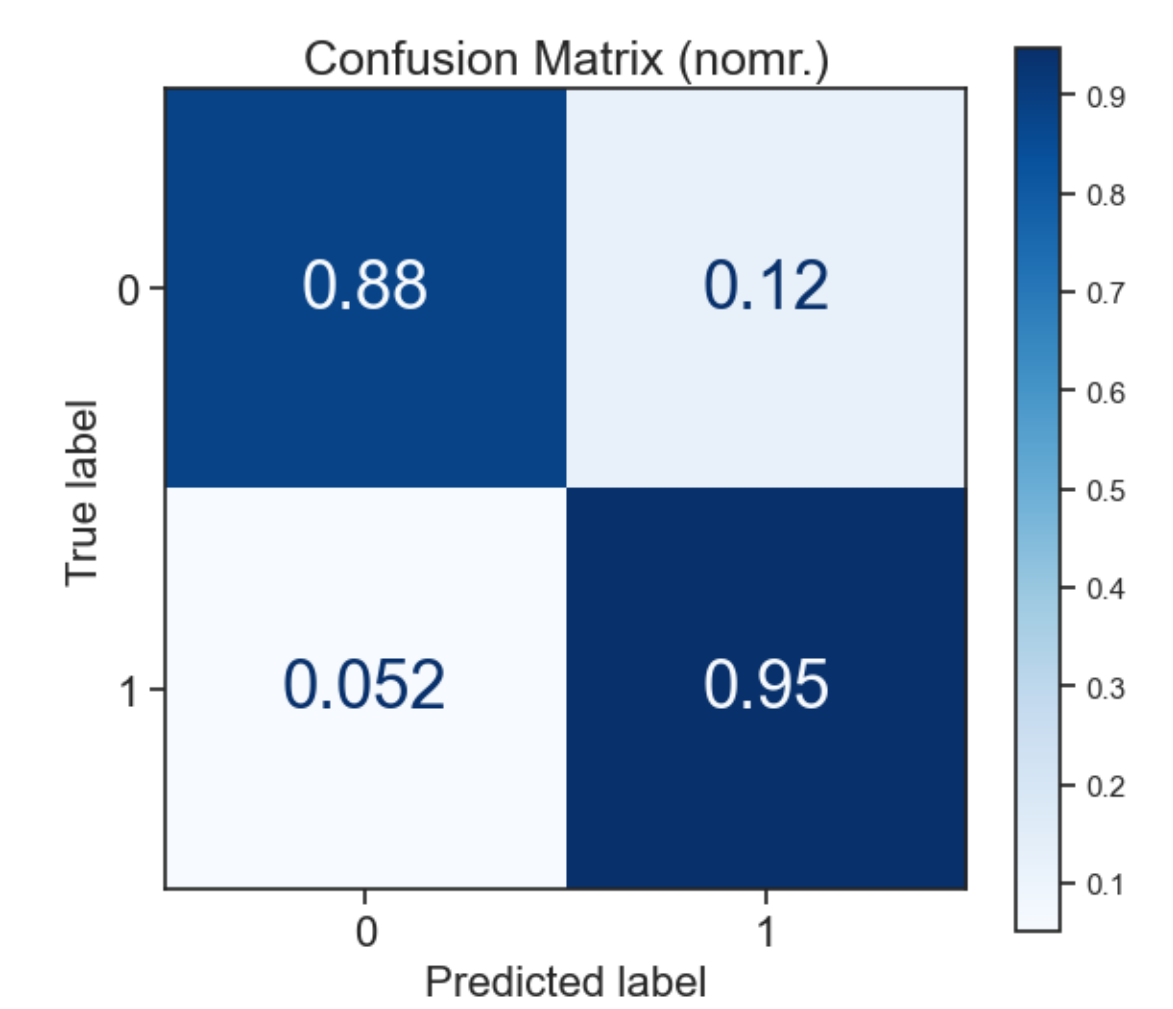
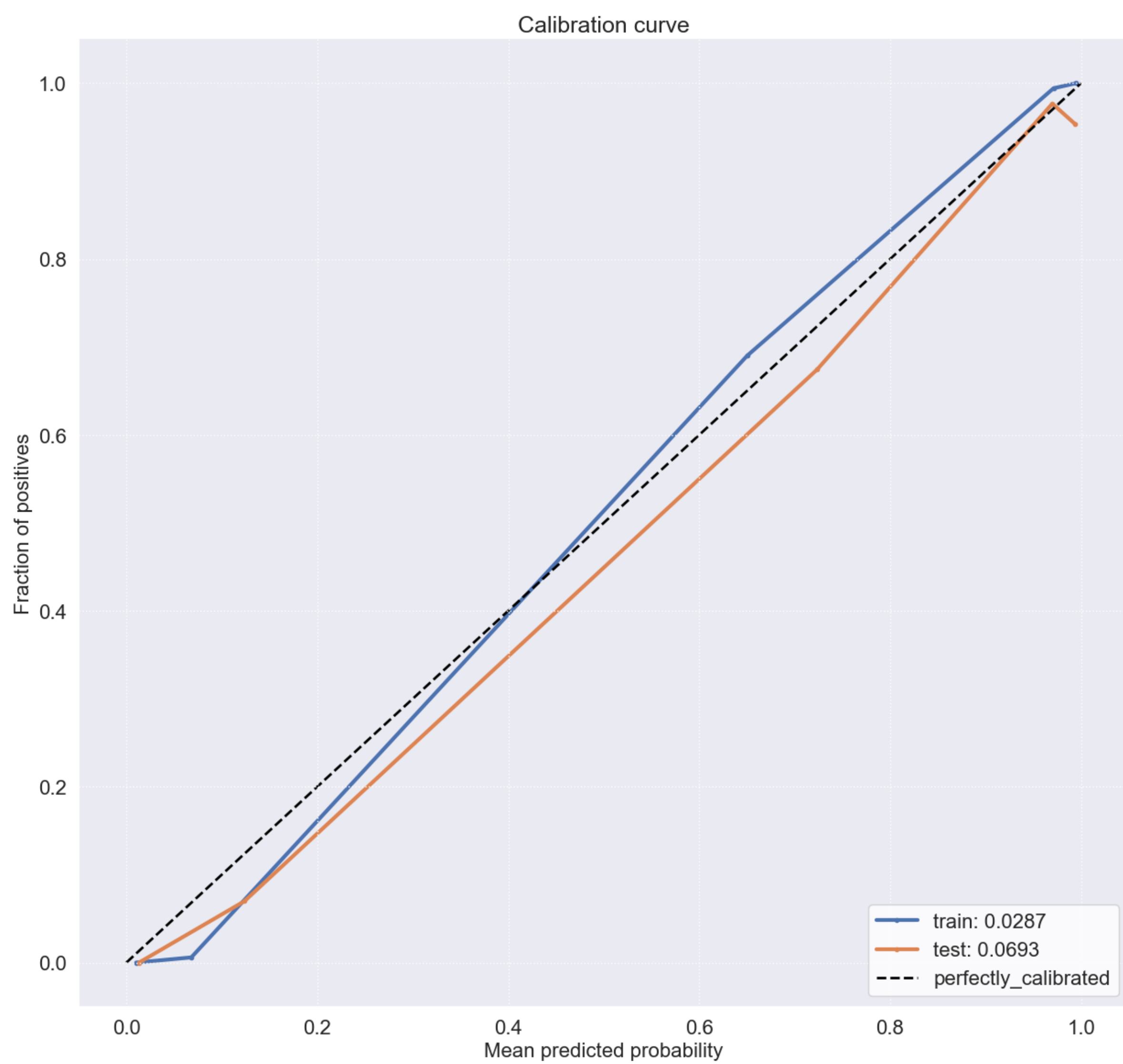
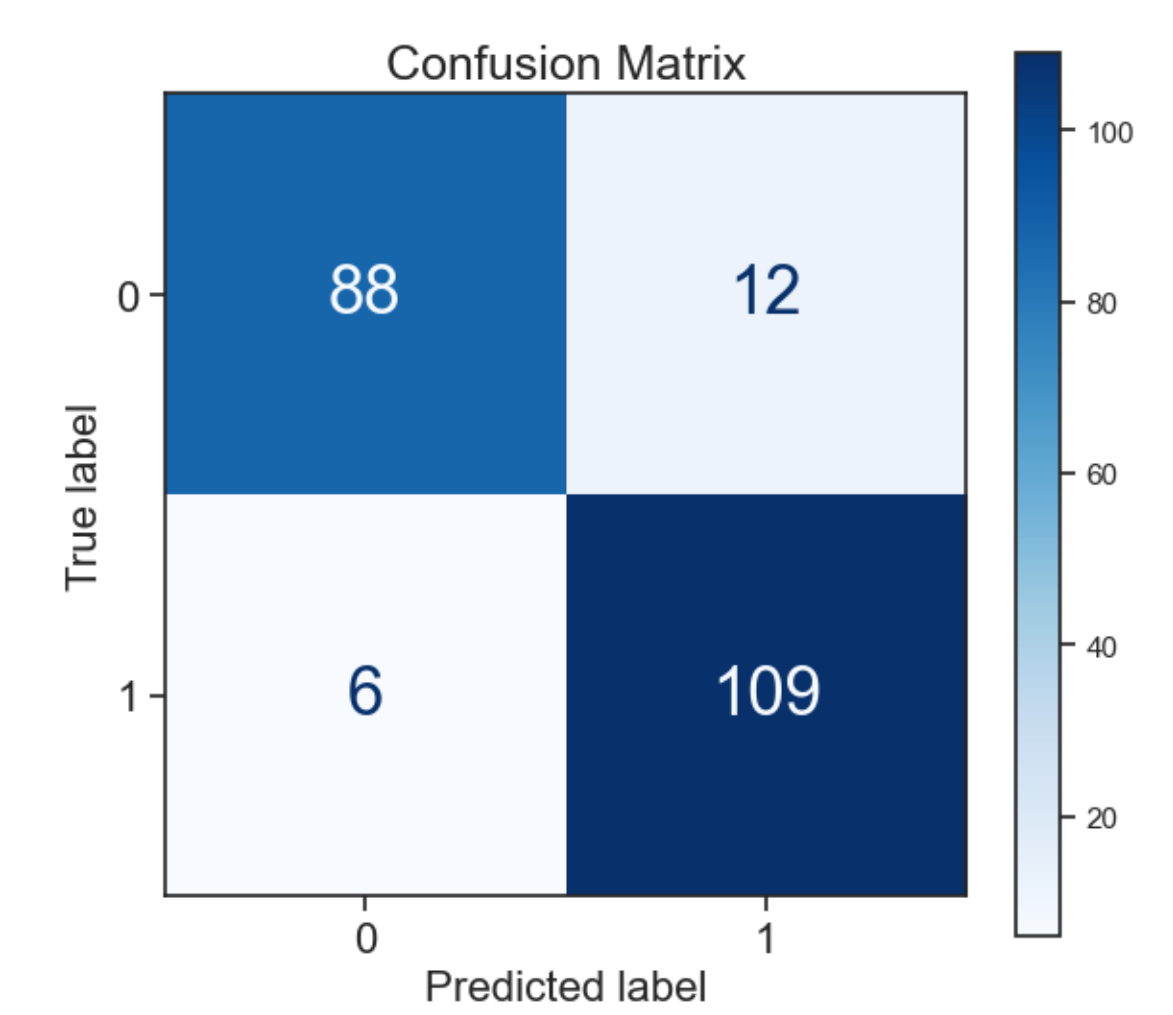


Metric	Train	Test
AUC	0.9977	0.9666
accuracy	0.9696	0.9256
balanced accuracy	0.9672	0.92
recall_(sens)	1.0	1.0
specificity	0.9343	0.84
precision	0.9465	0.8779
f1_score	0.9695	0.9248

Protein: P31639 - metric: precision

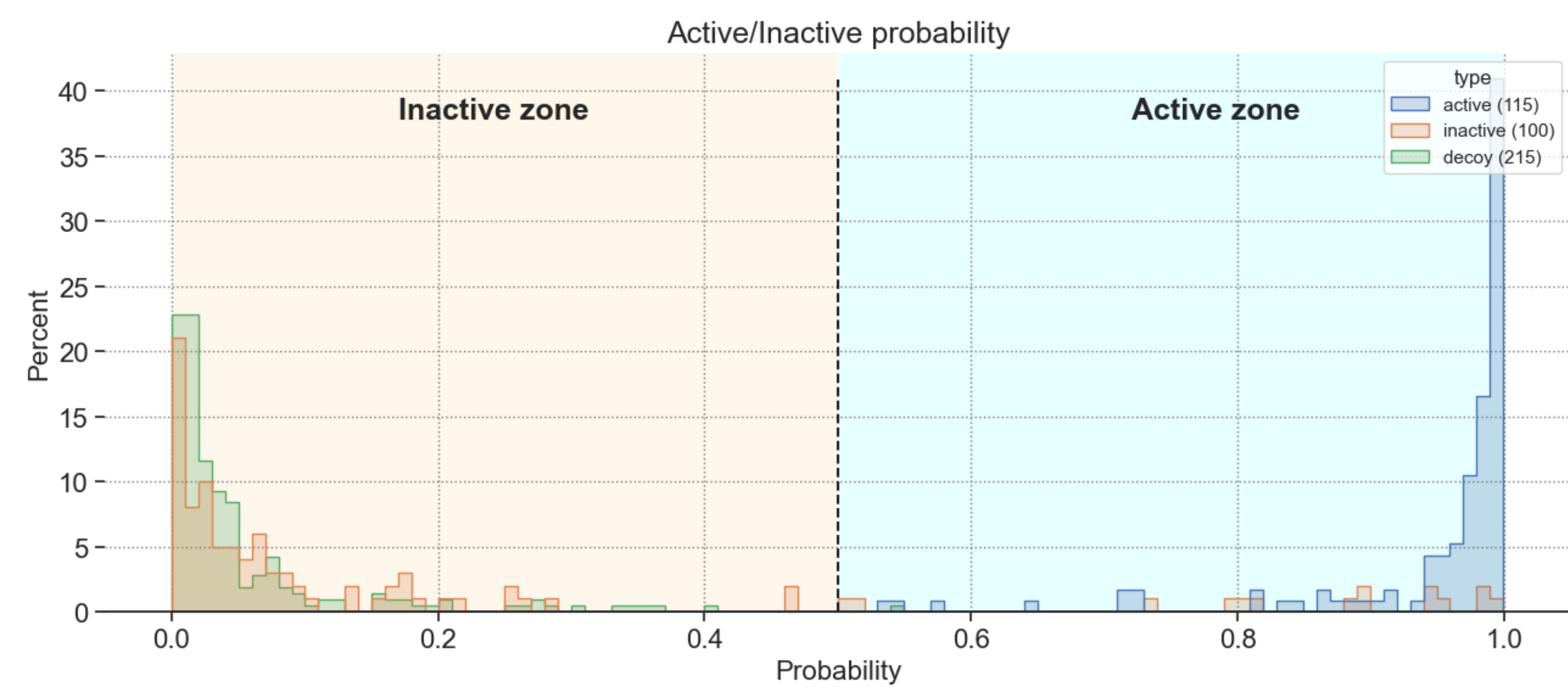
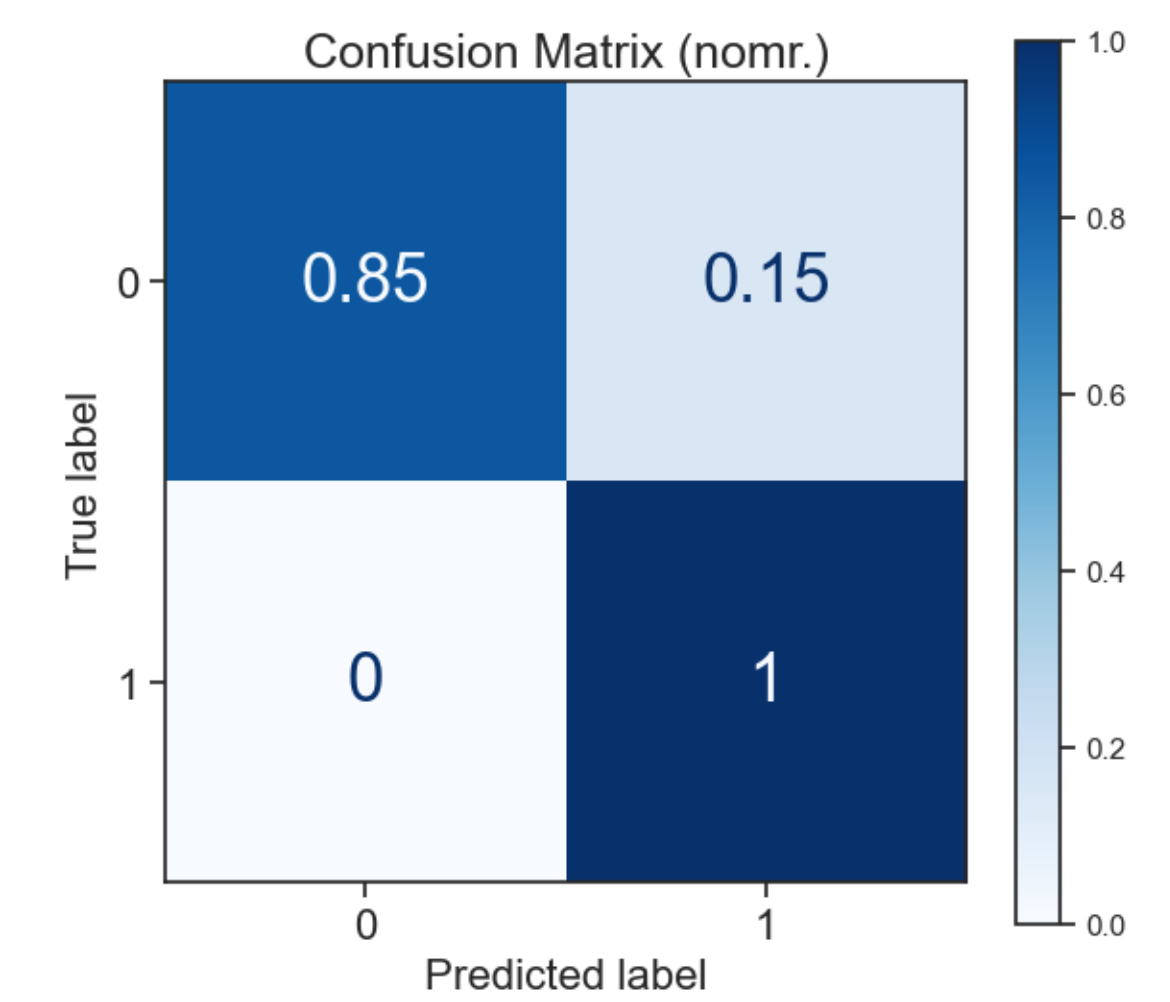
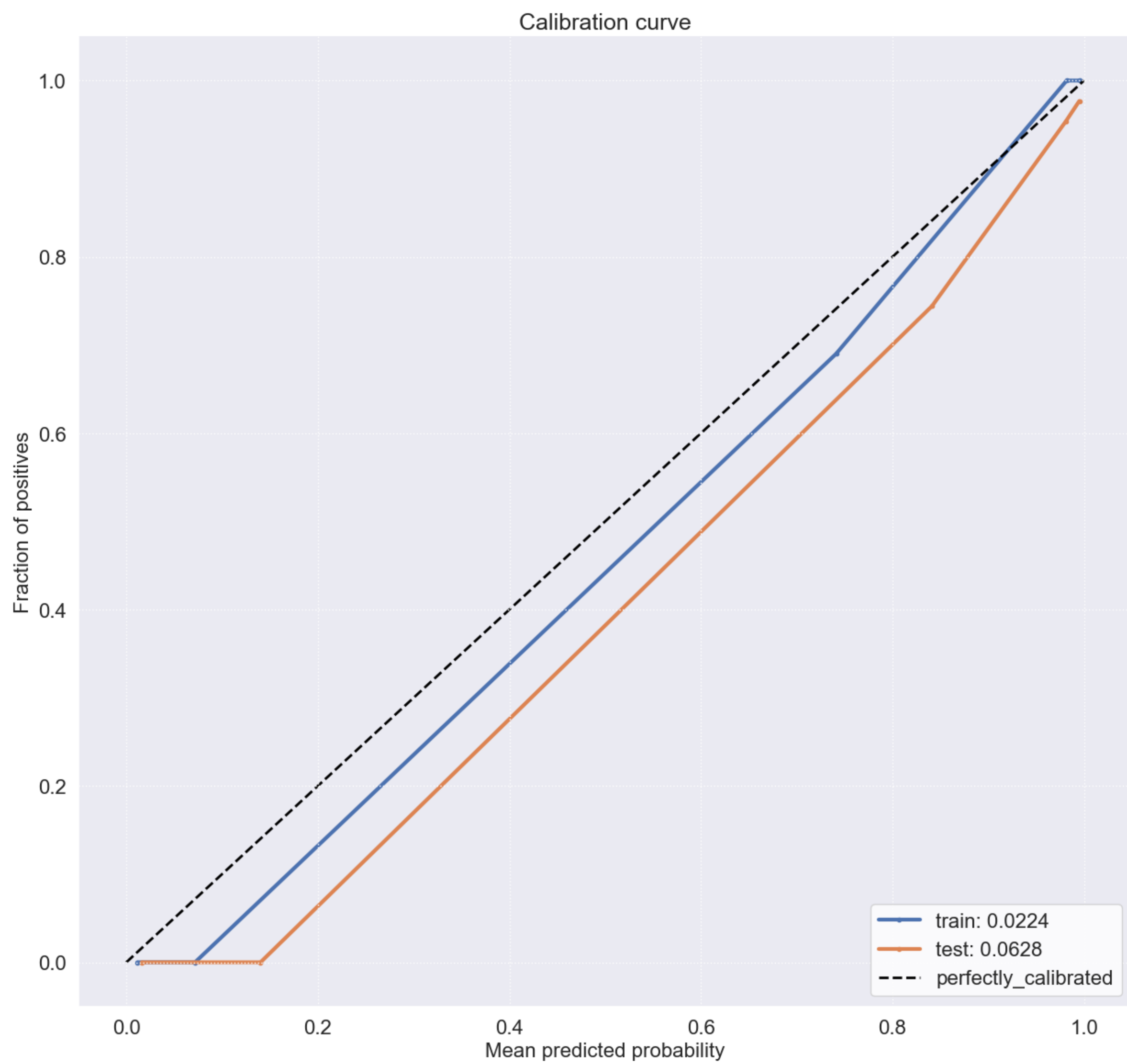
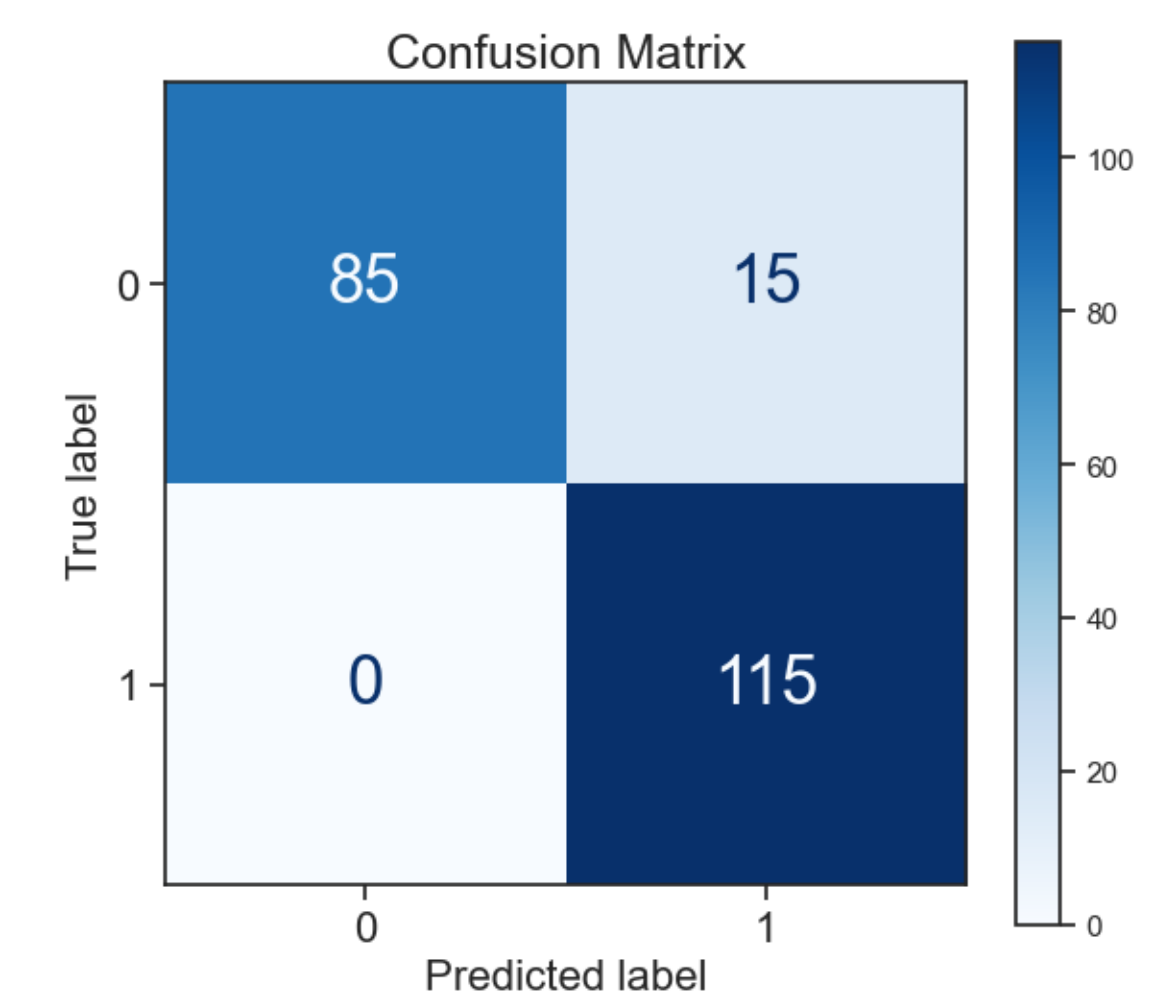
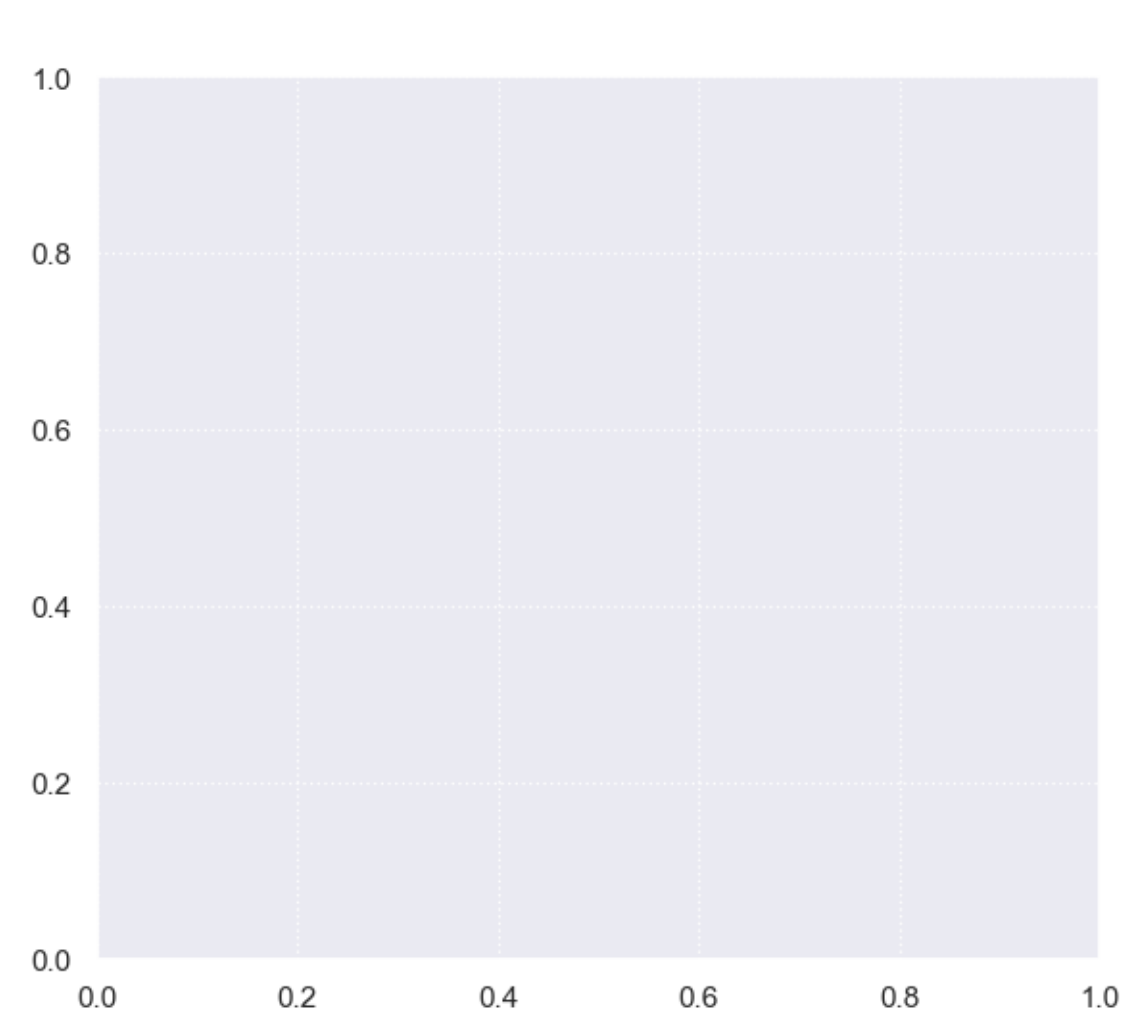
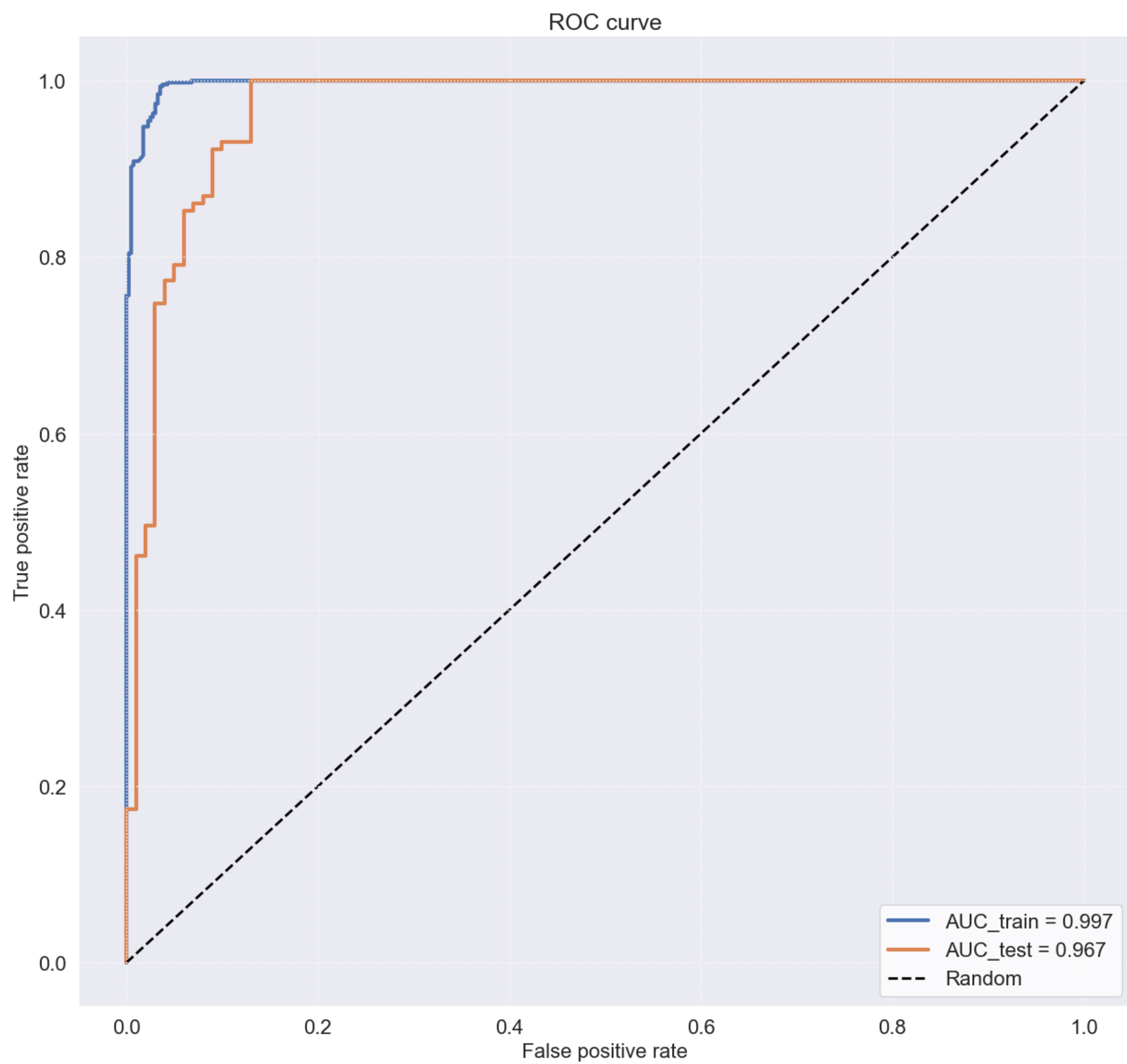
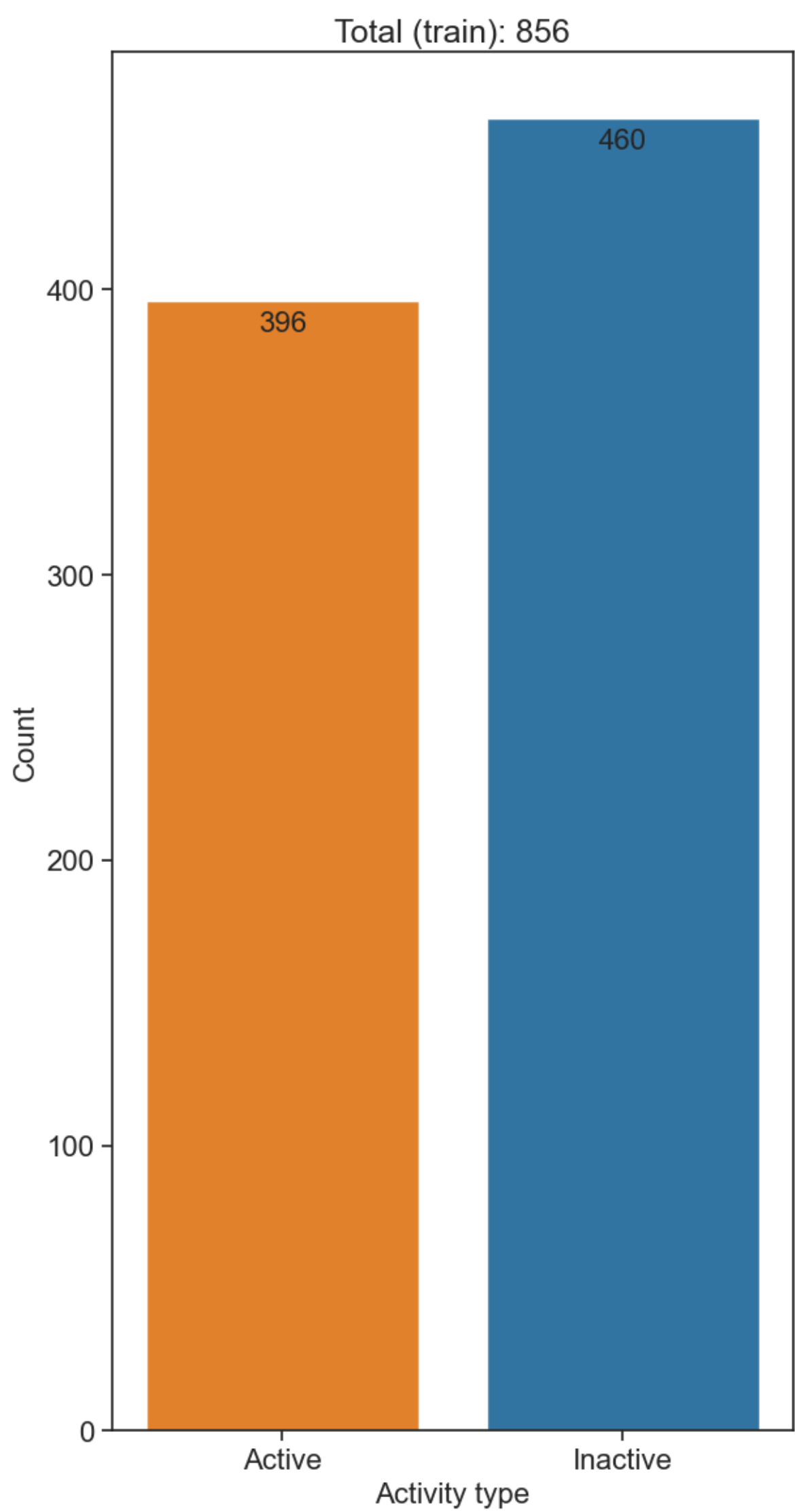


XGBoost Parameters	Value	
alpha	4.2006	
colsample_bytree	0.9426	
gamma	0.0211	
lambda	3.6519	
learning_rate	0.1715	
max_depth	9.0	
min_child_weight	4.0	
n_estimators	300.0	
reg_alpha	0.5501	
reg_lambda	0.7094	
scale_pos_weight	1.0642	
subsample	0.5573	



Metric	Train	Test
AUC	0.9946	0.9628
accuracy	0.965	0.9163
balanced accuracy	0.9651	0.9139
recall_(sens)	0.963	0.9478
specificity	0.9672	0.88
precision	0.9715	0.9008
f1_score	0.965	0.916

Protein: P31639 - metric: SoftVotingXGBoostEnsemble



Metric	Train	Test
AUC	0.997	0.9674
accuracy	0.9778	0.9302
balanced accuracy	0.9762	0.925
recall_(sens)	0.9978	1.0
specificity	0.9545	0.85
precision	0.9623	0.8846
f1_score	0.9778	0.9295