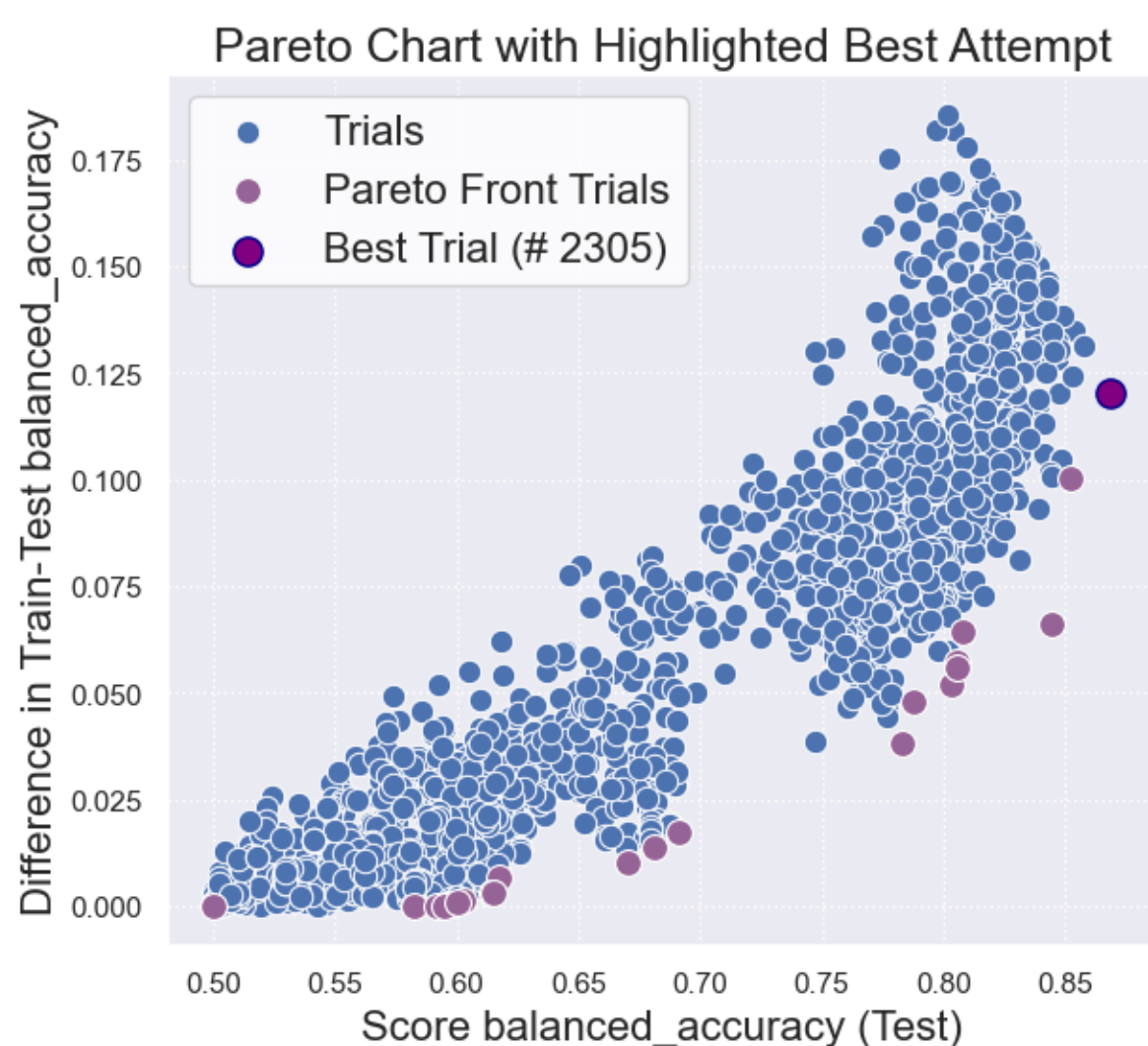
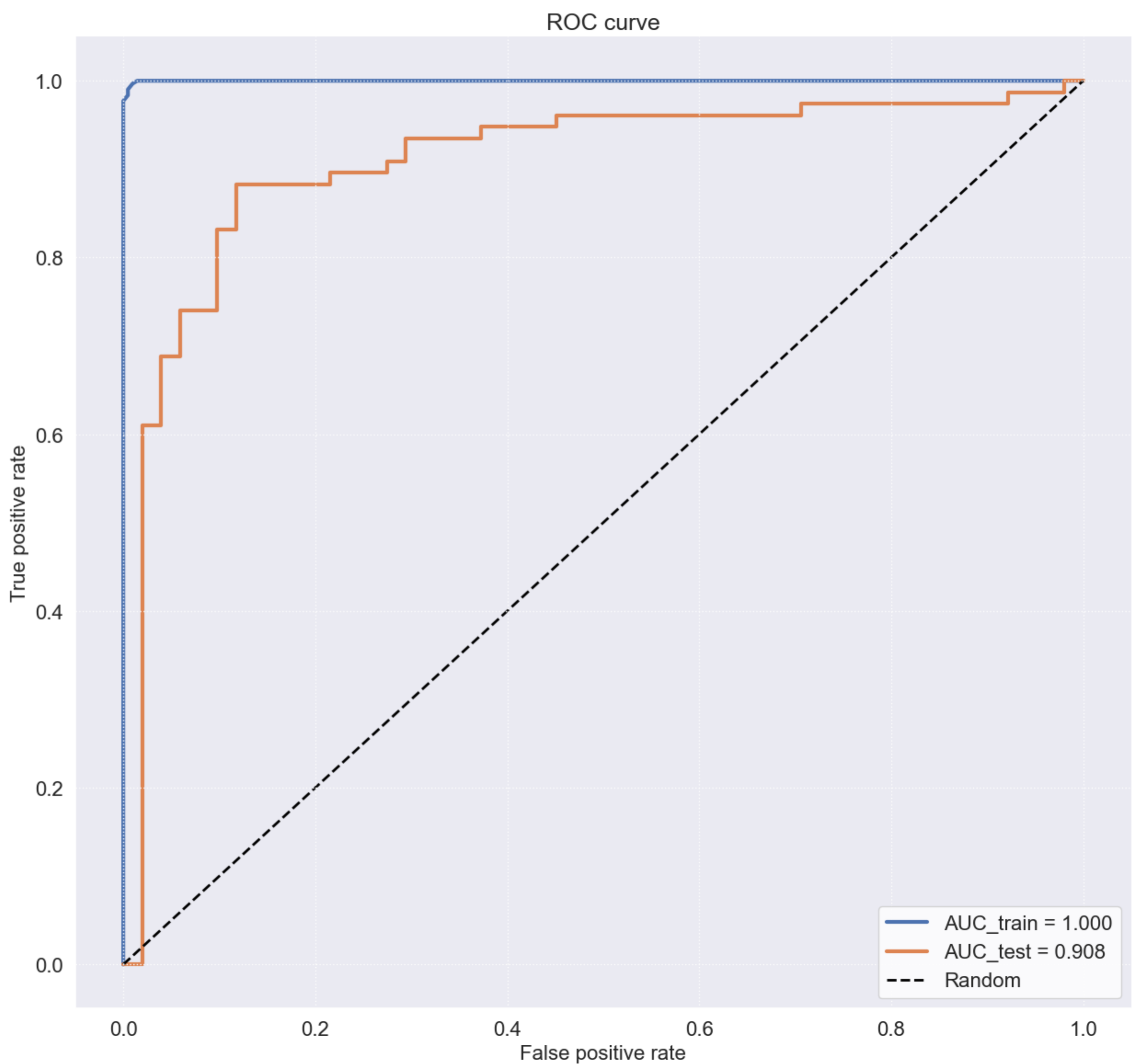
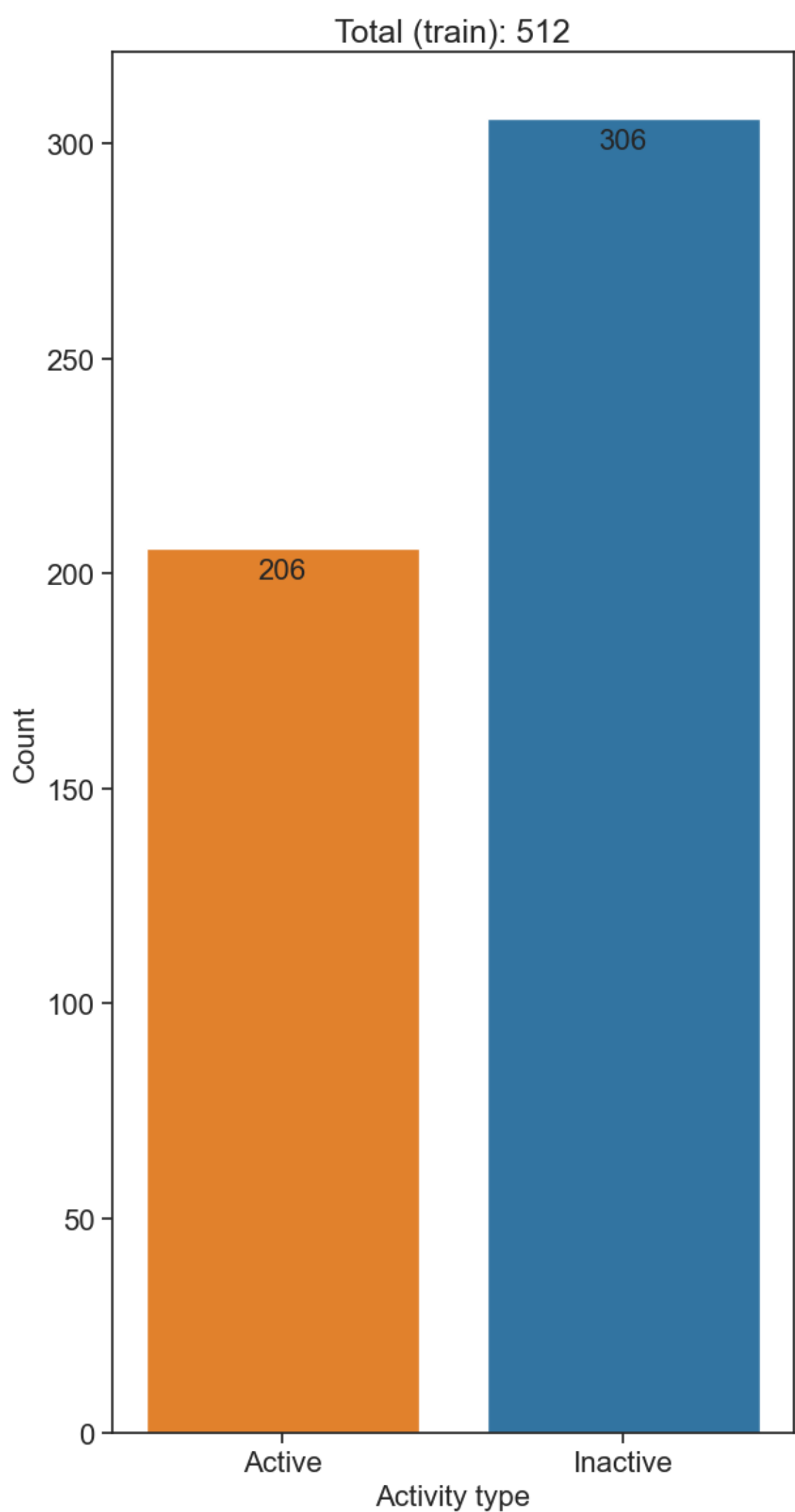
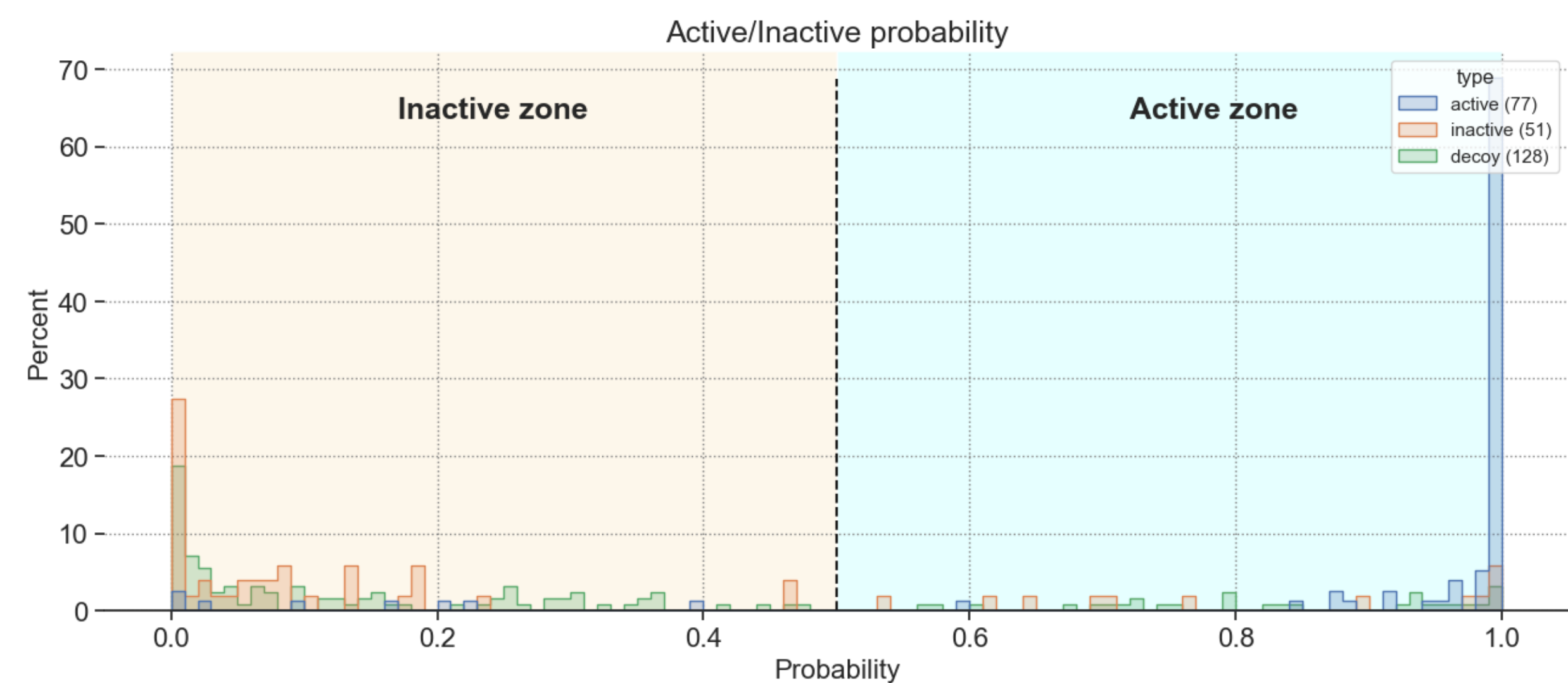
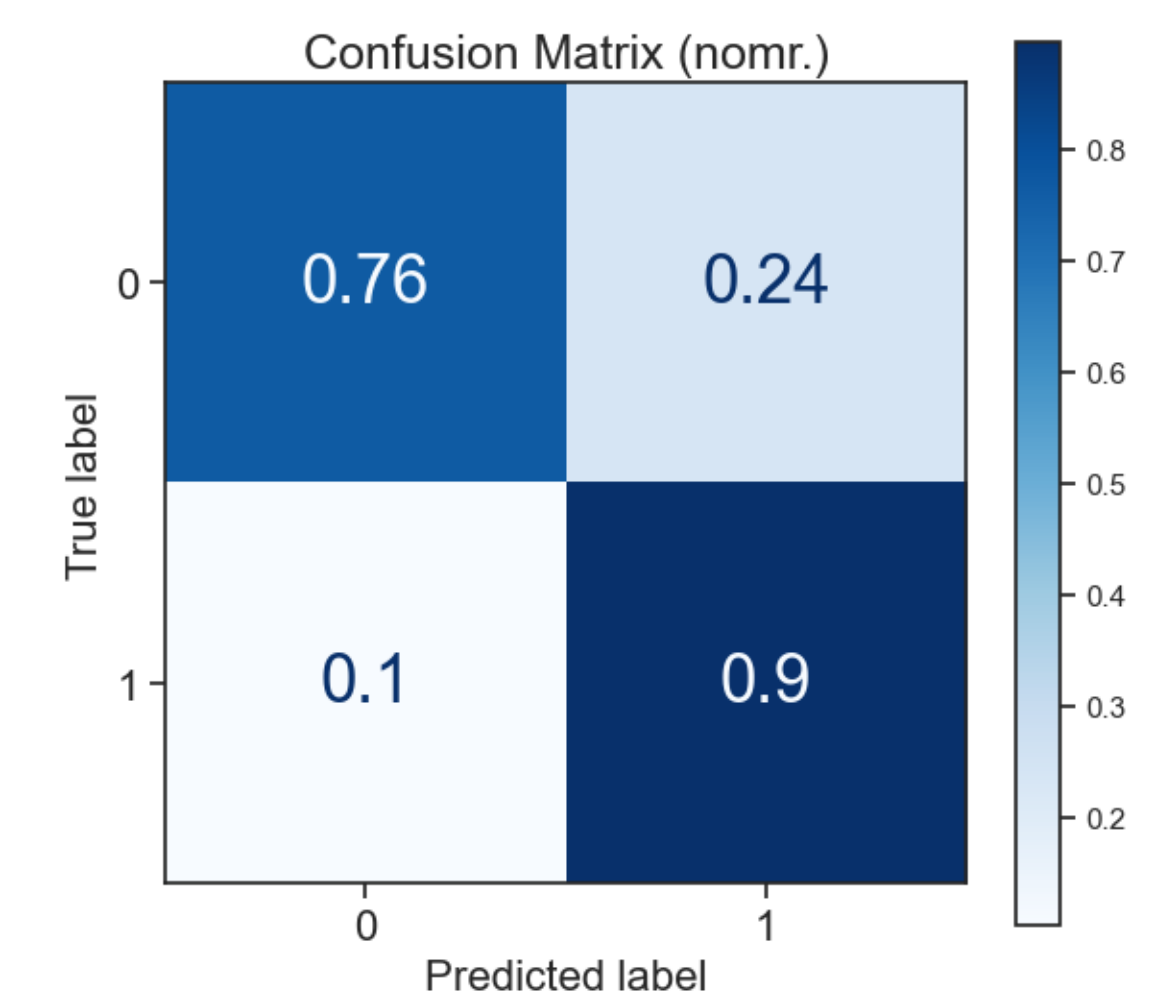
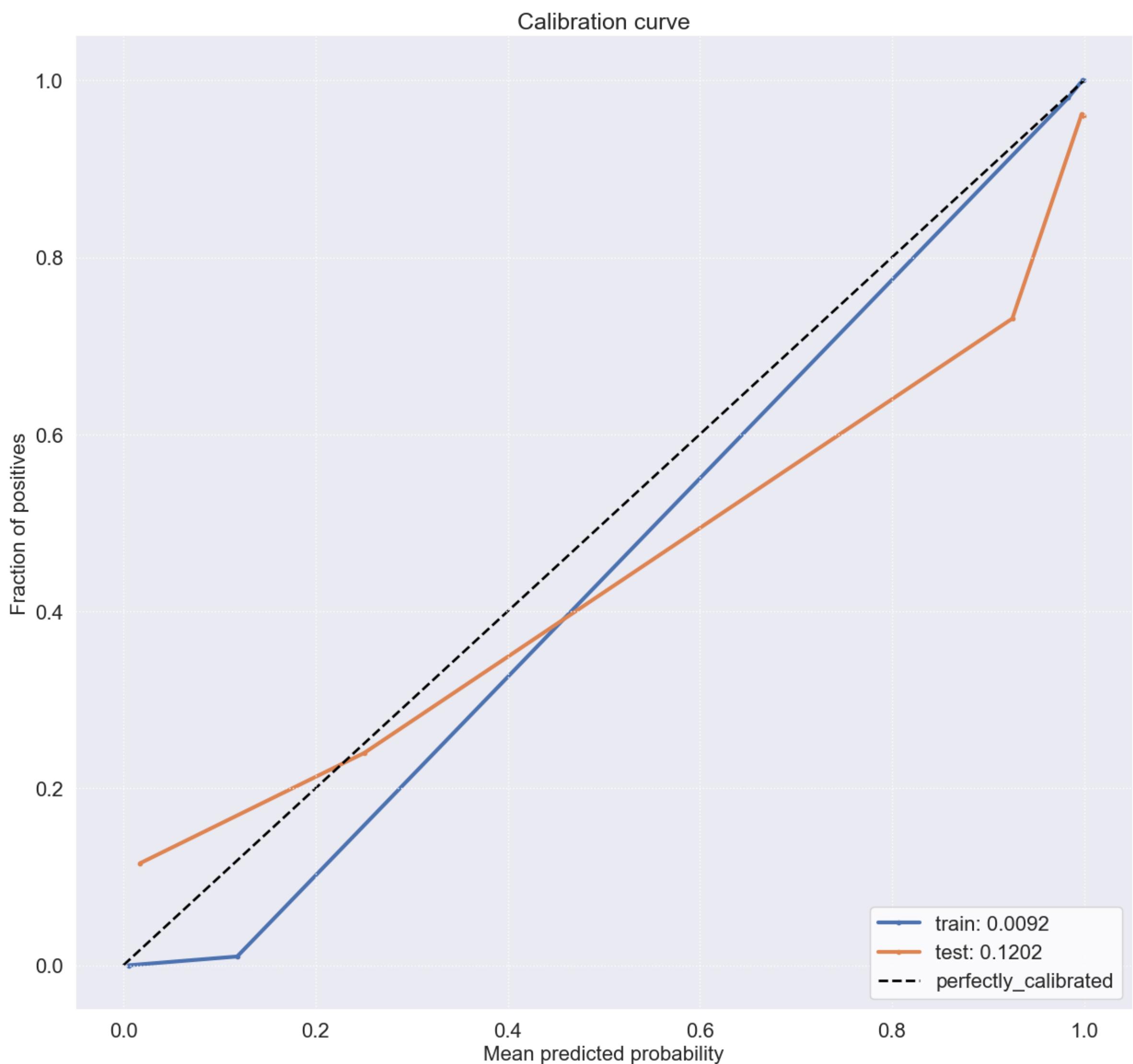
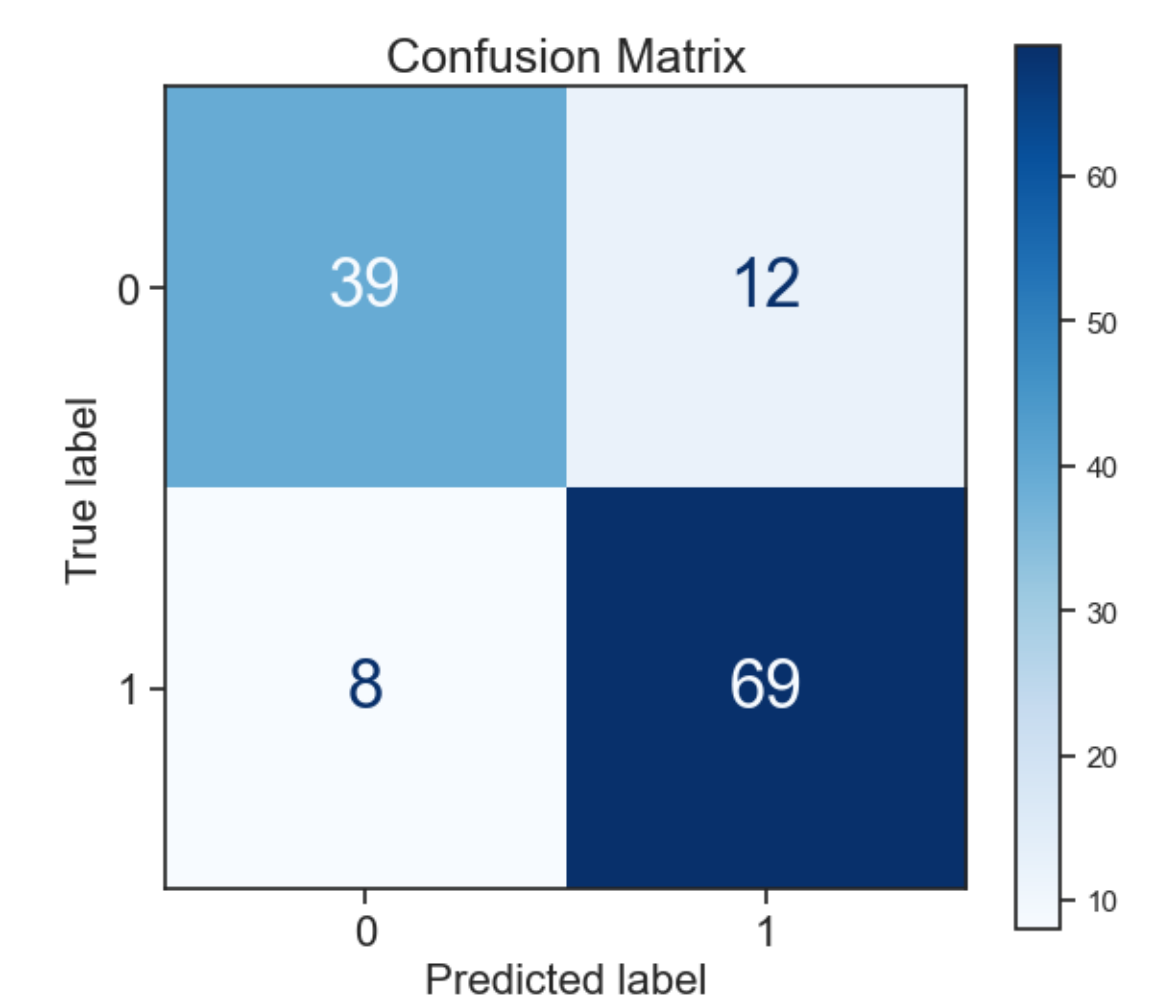


Protein: P08913 - metric: balanced_accuracy

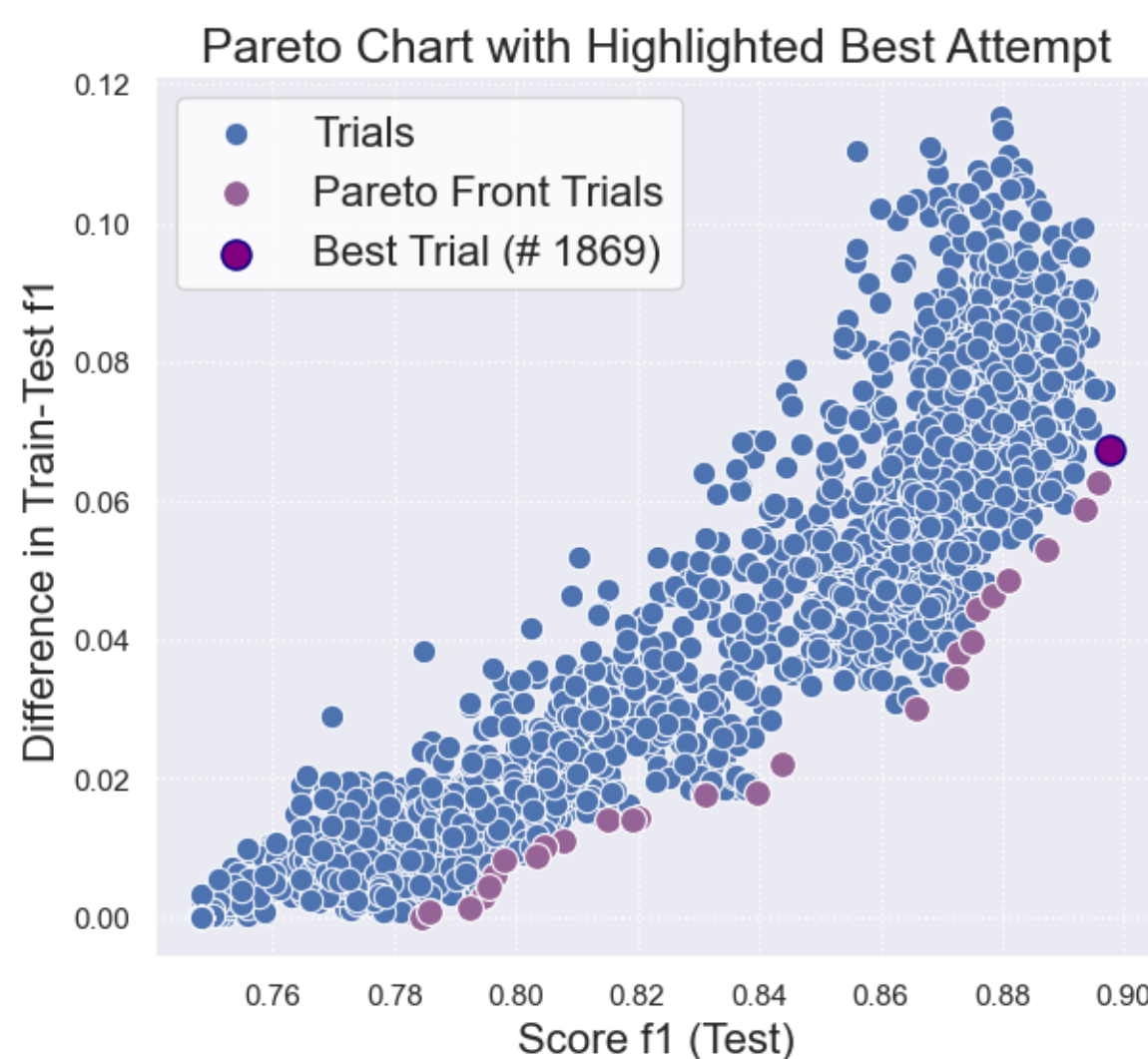
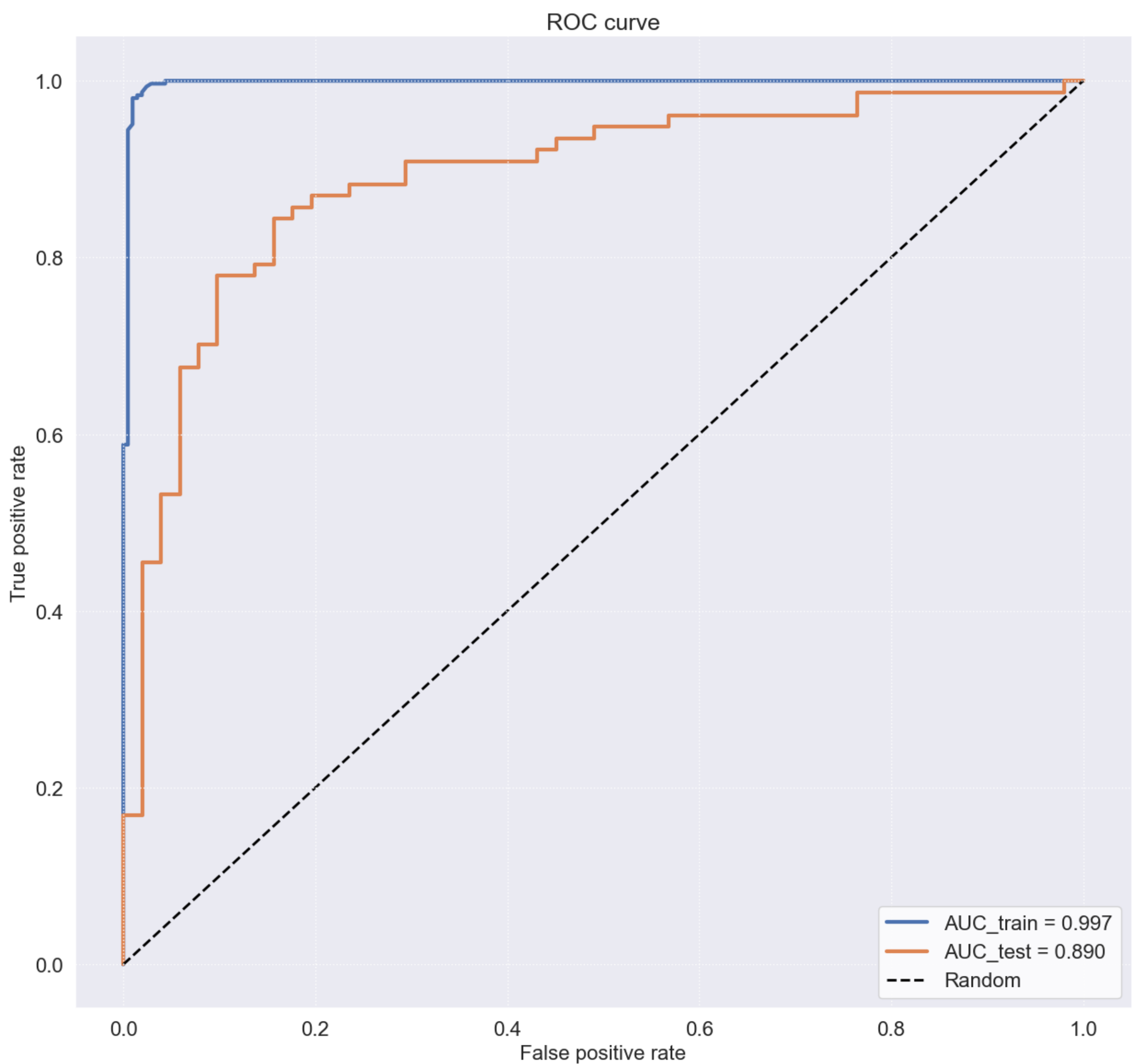
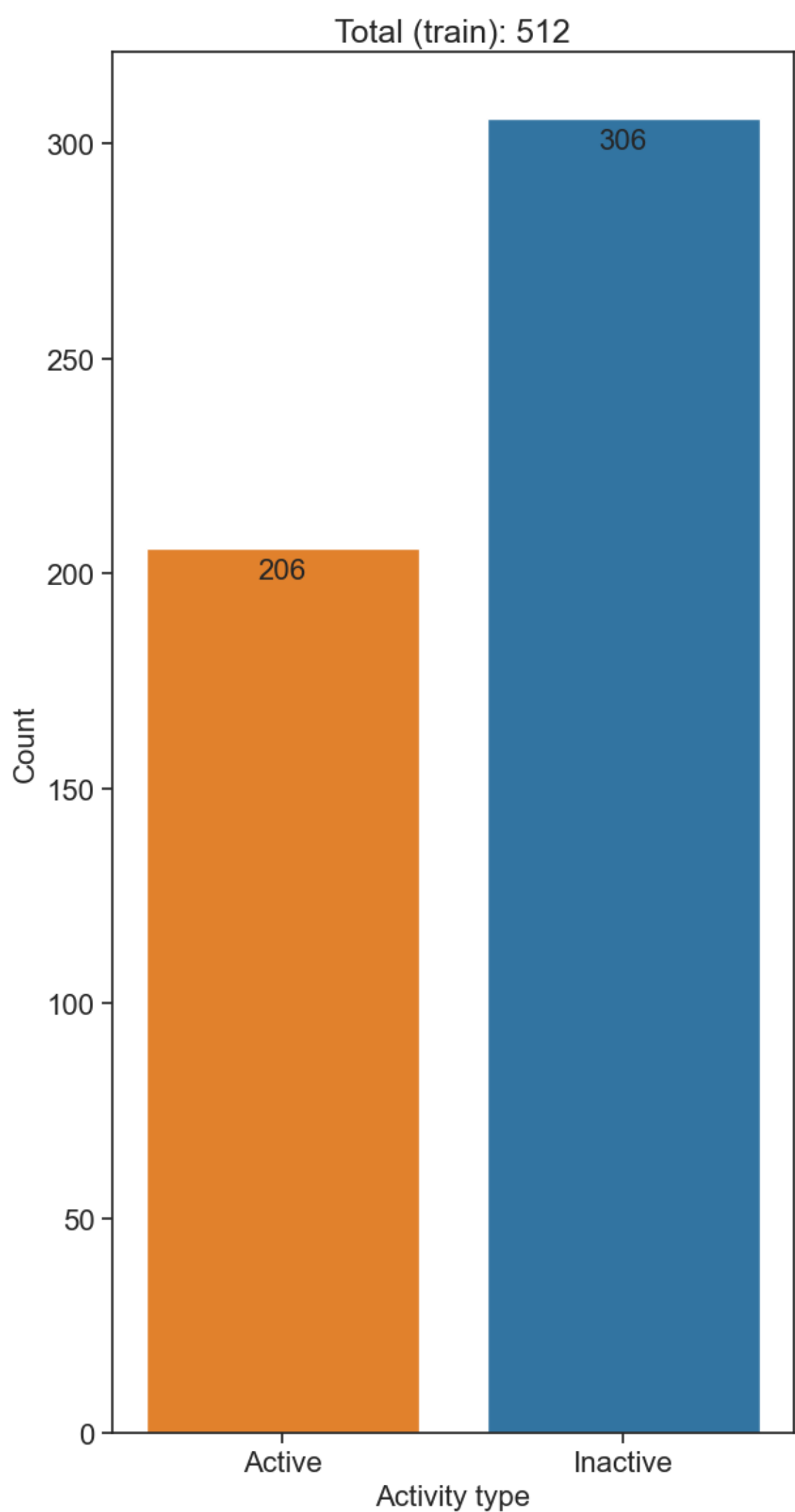


XGBoost Parameters	Value
alpha	3.1597
colsample_bytree	0.9737
gamma	0.0129
lambda	4.6342
learning_rate	0.3801
max_depth	3.0
min_child_weight	2.0
n_estimators	460.0
reg_alpha	0.5099
reg_lambda	0.6544
scale_pos_weight	7.27
subsample	0.9528

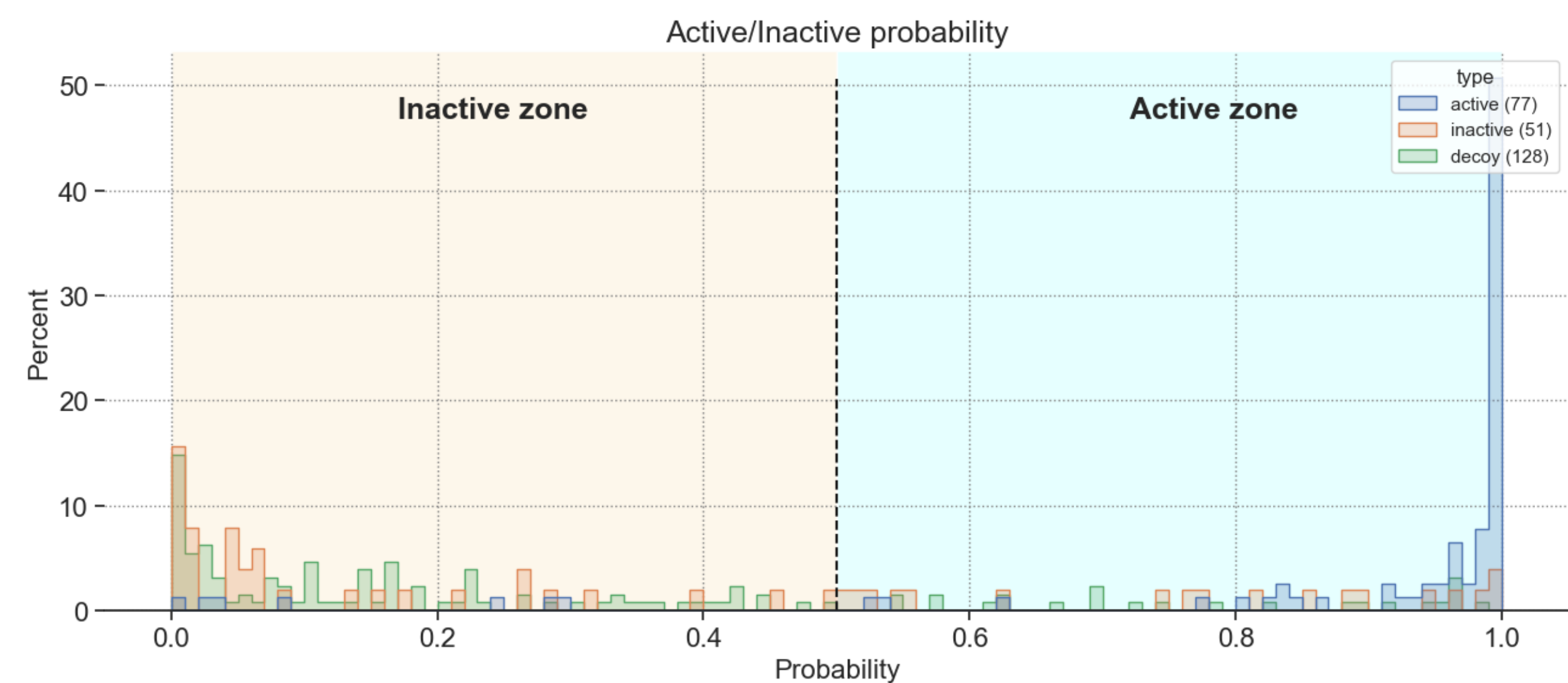
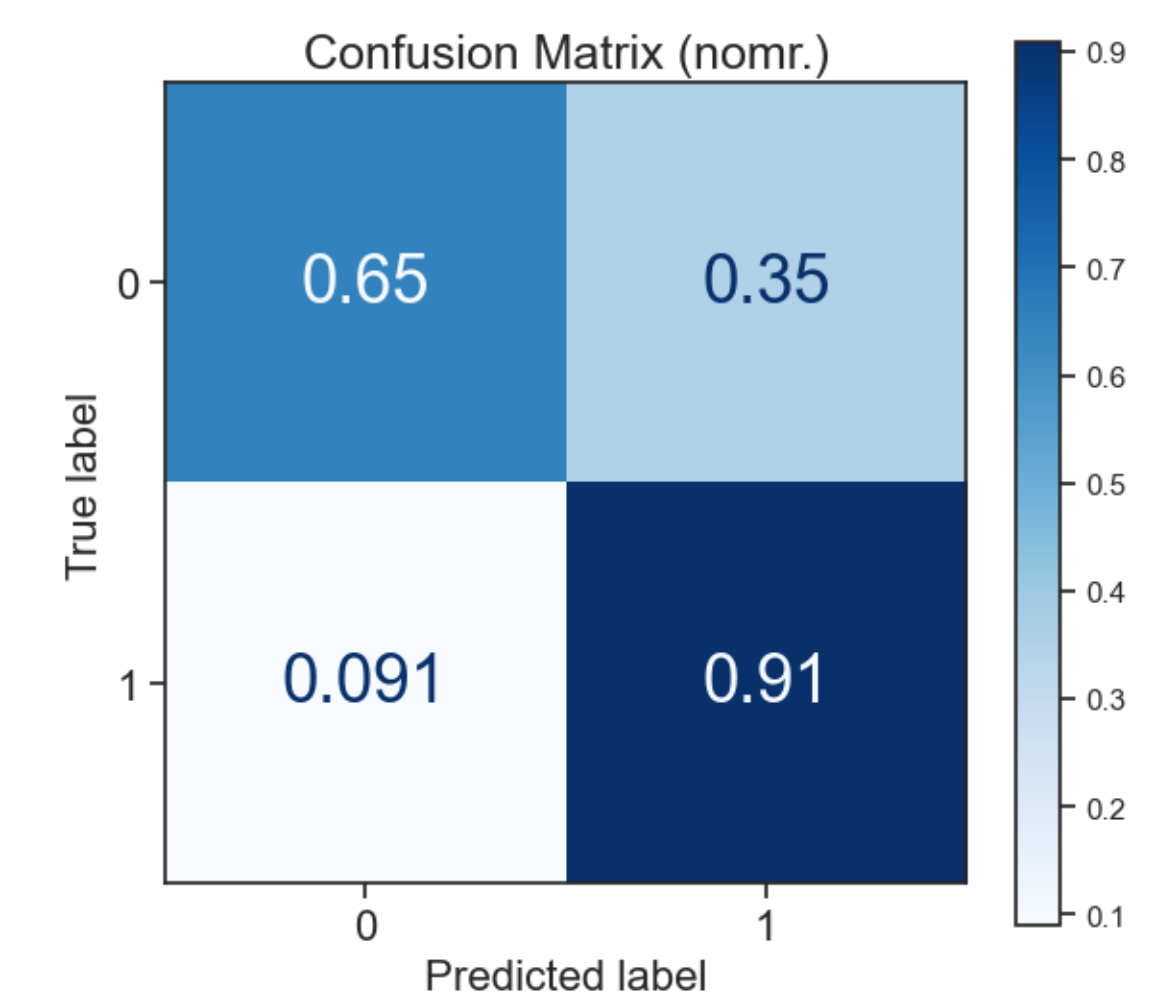
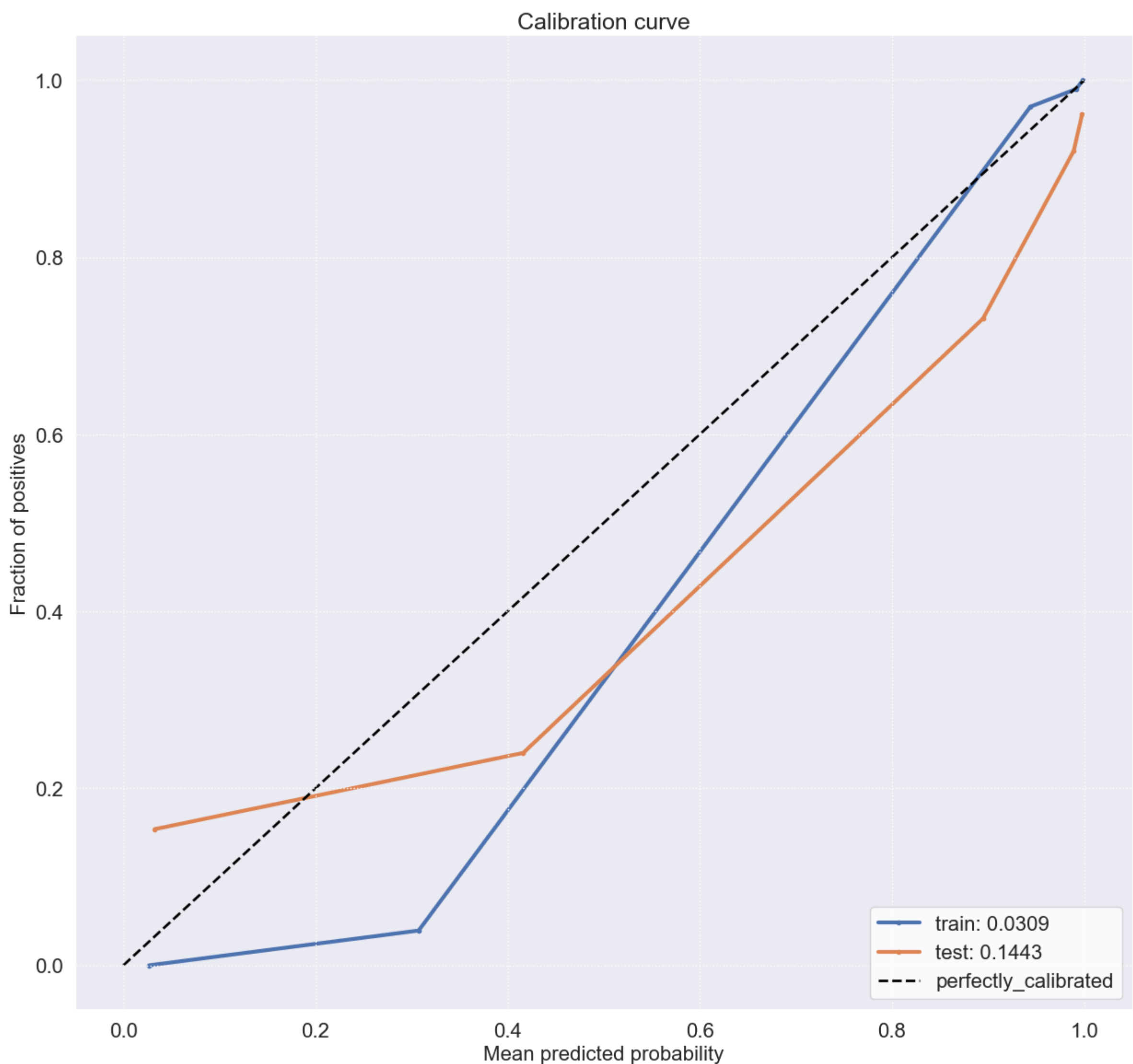
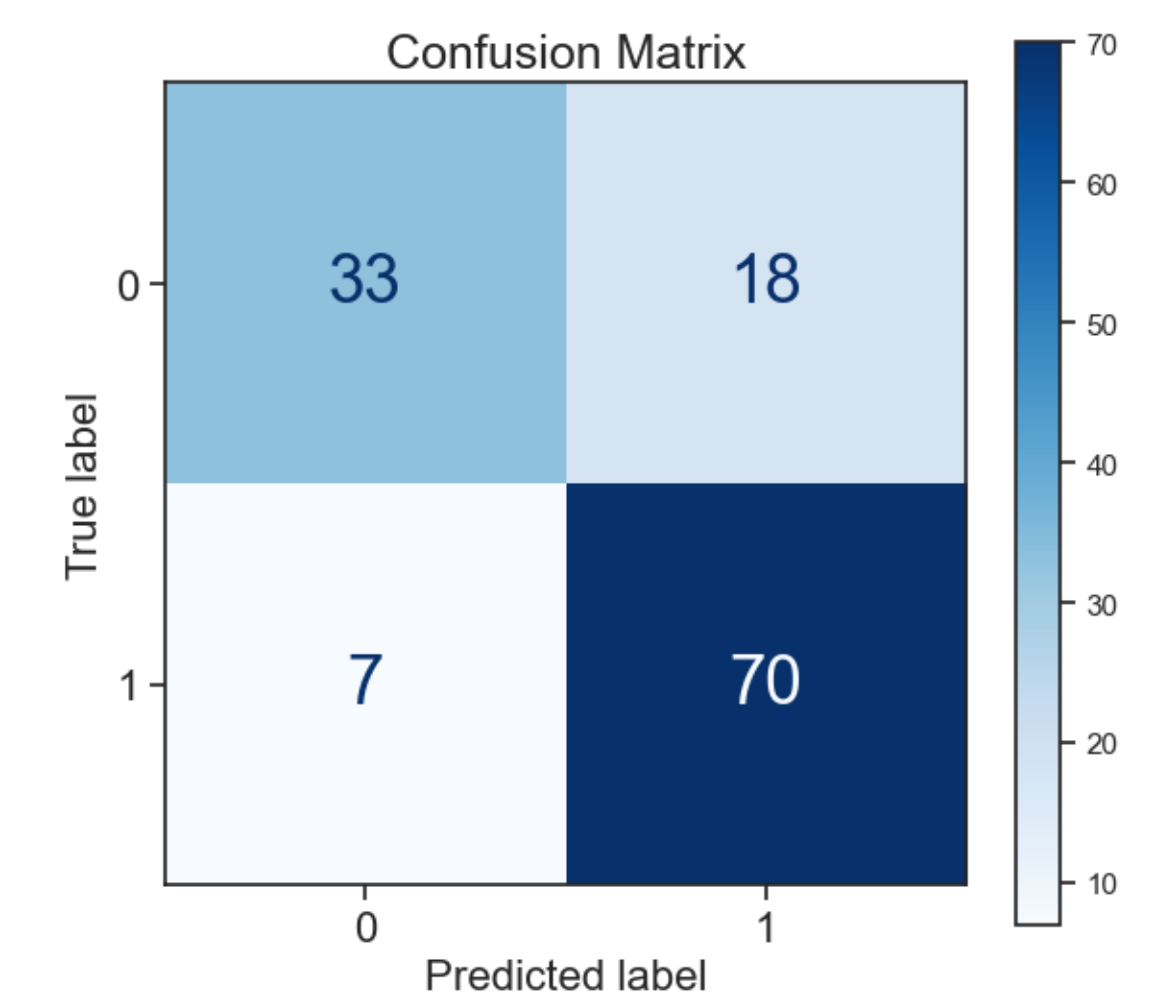


Metric	Train	Test
AUC	0.9999	0.9083
accuracy	0.9922	0.8438
balanced accuracy	0.9903	0.8304
recall_(sens)	1.0	0.8961
specificity	0.9806	0.7647
precision	0.9871	0.8519
f1_score	0.9922	0.8425

Protein: P08913 - metric: f1

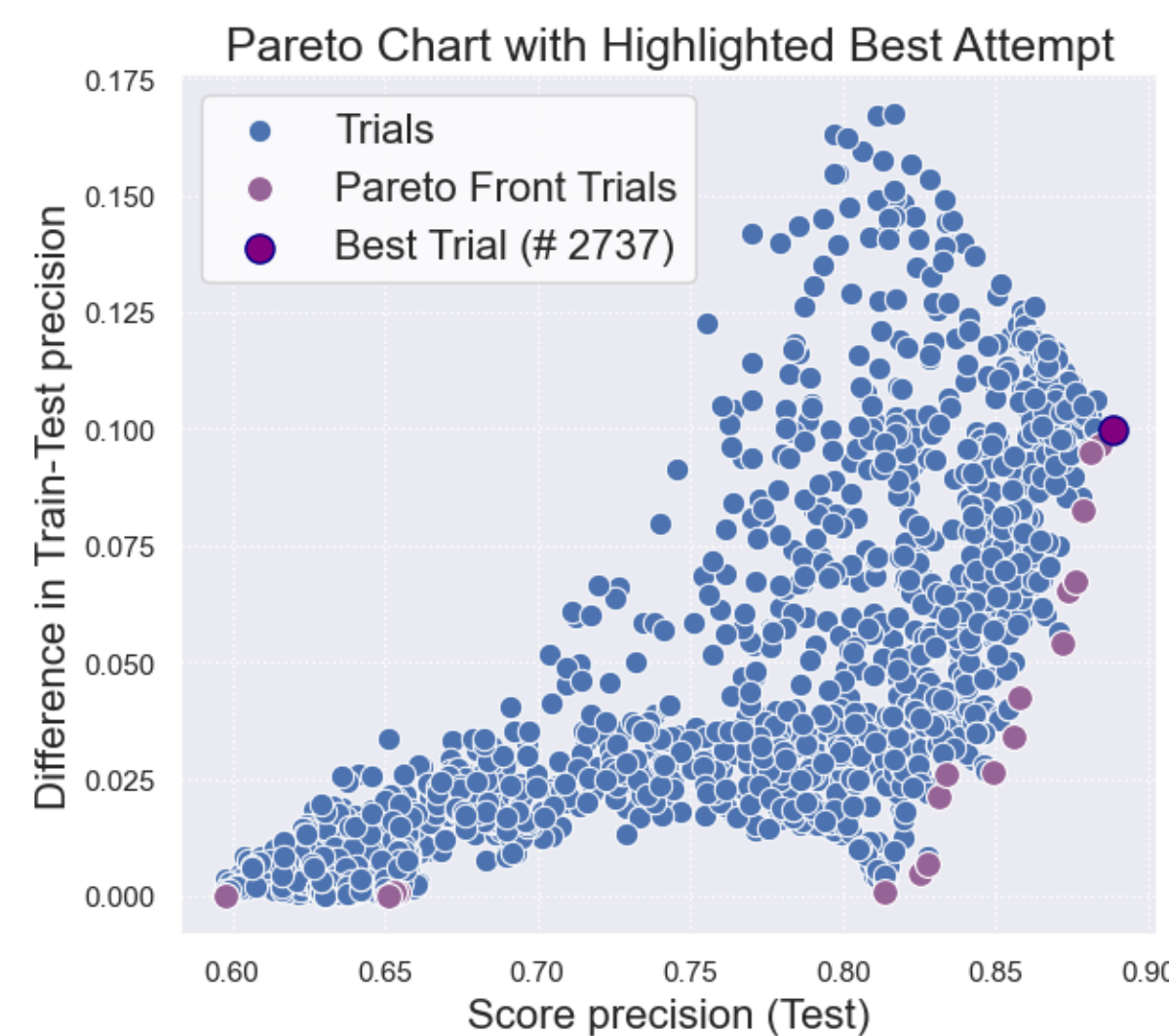
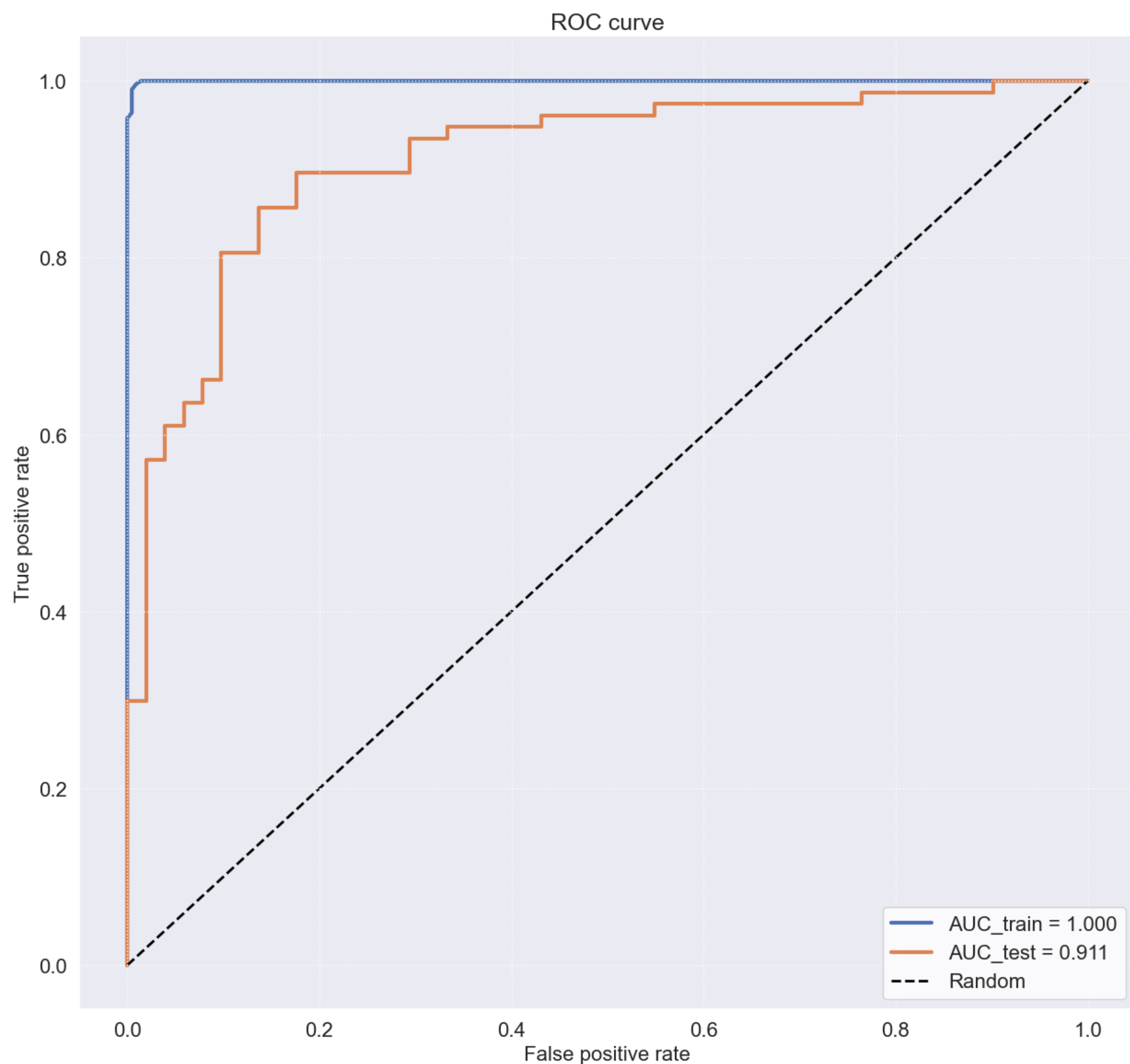
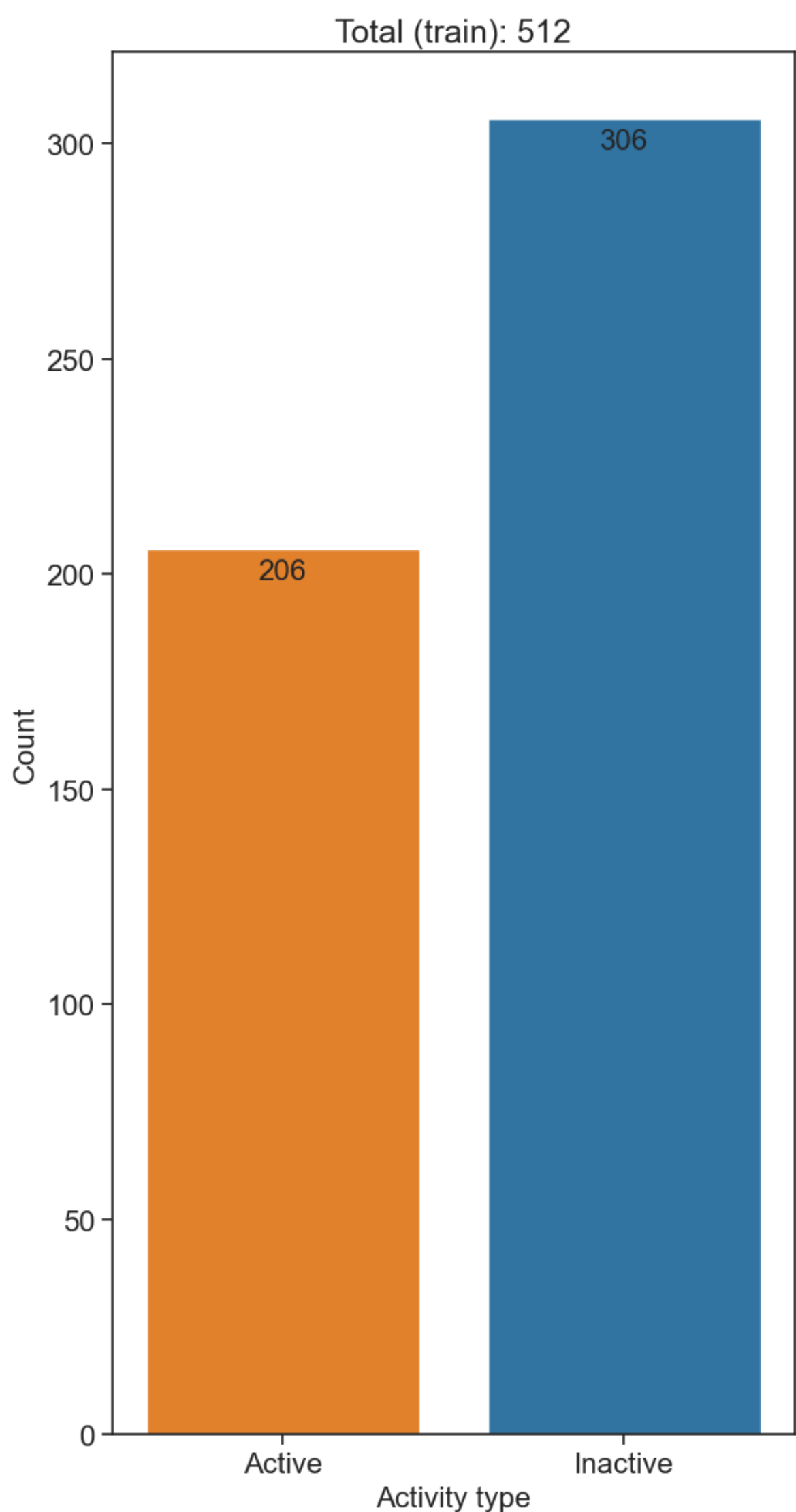


XGBoost Parameters	Value
alpha	4.5133
colsample_bytree	0.7269
gamma	0.9273
lambda	0.4191
learning_rate	0.2856
max_depth	5.0
min_child_weight	4.0
n_estimators	204.0
reg_alpha	0.1812
reg_lambda	0.2855
scale_pos_weight	5.0599
subsample	0.6654

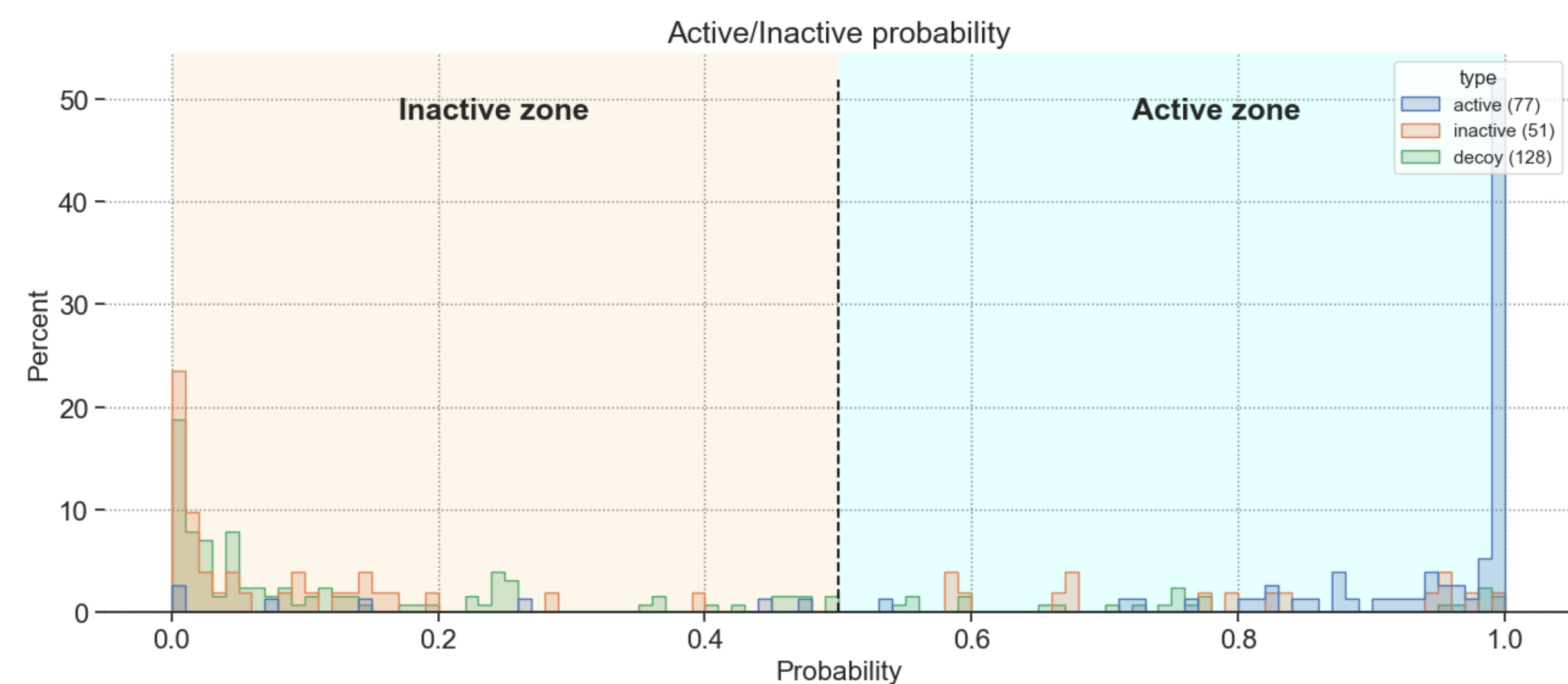
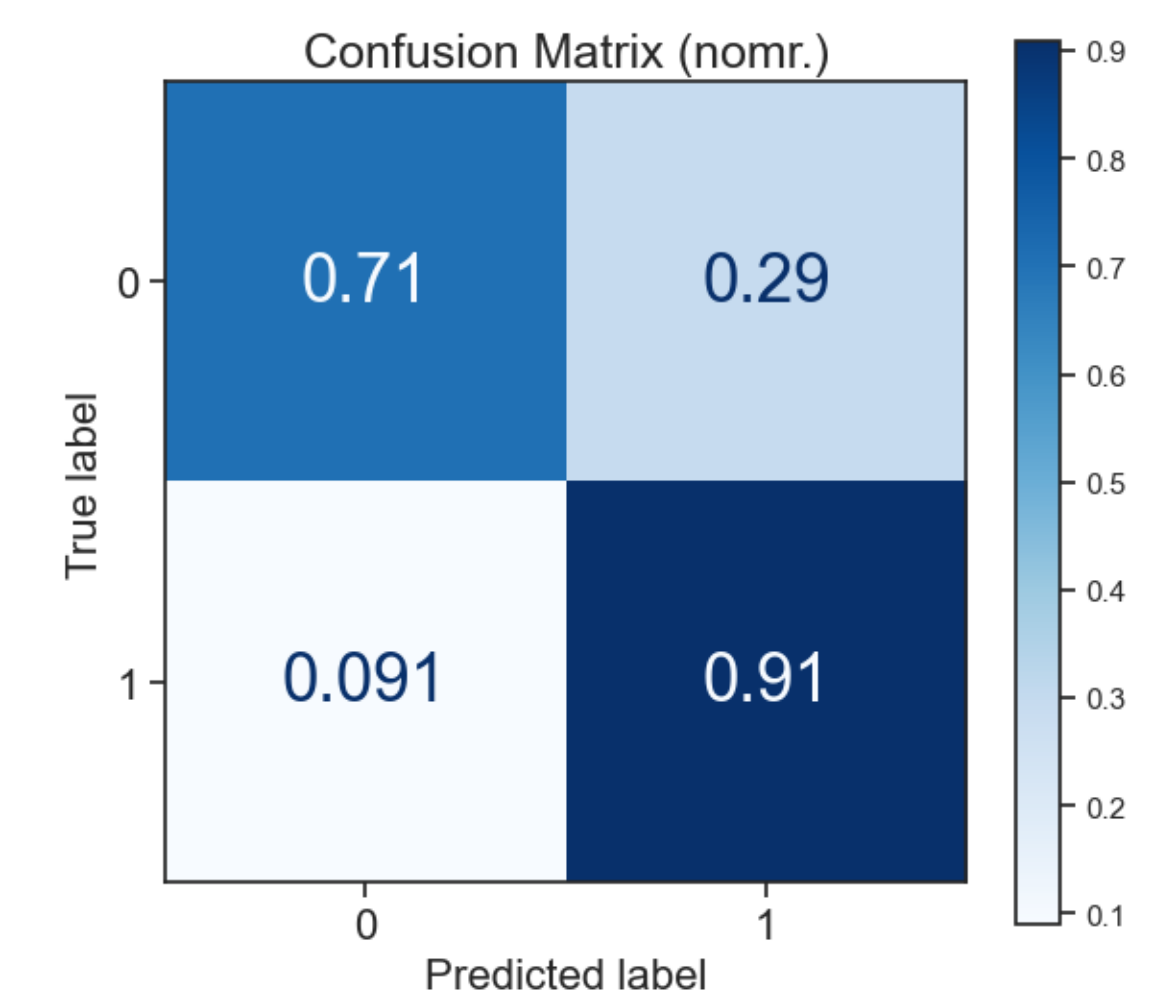
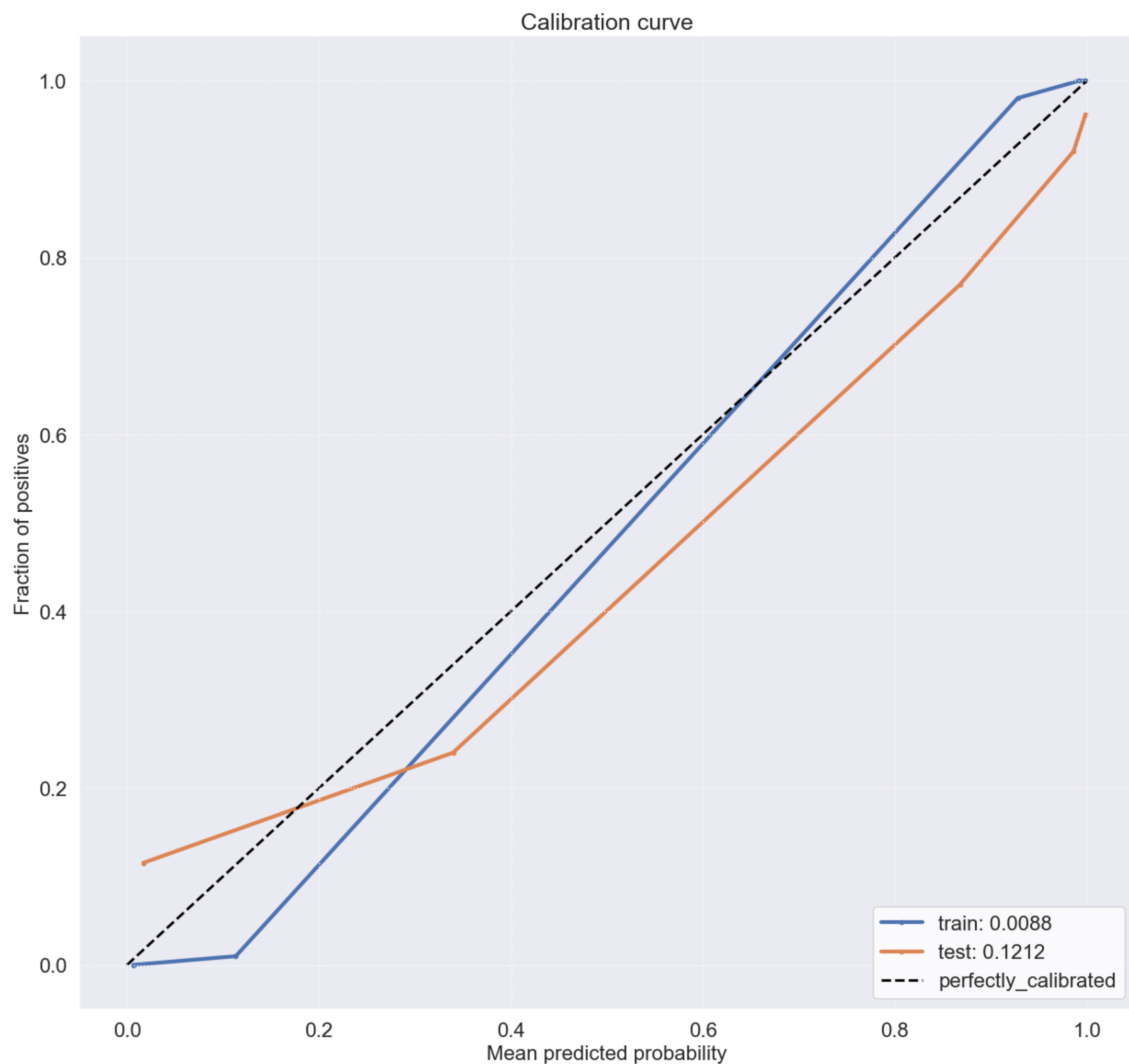
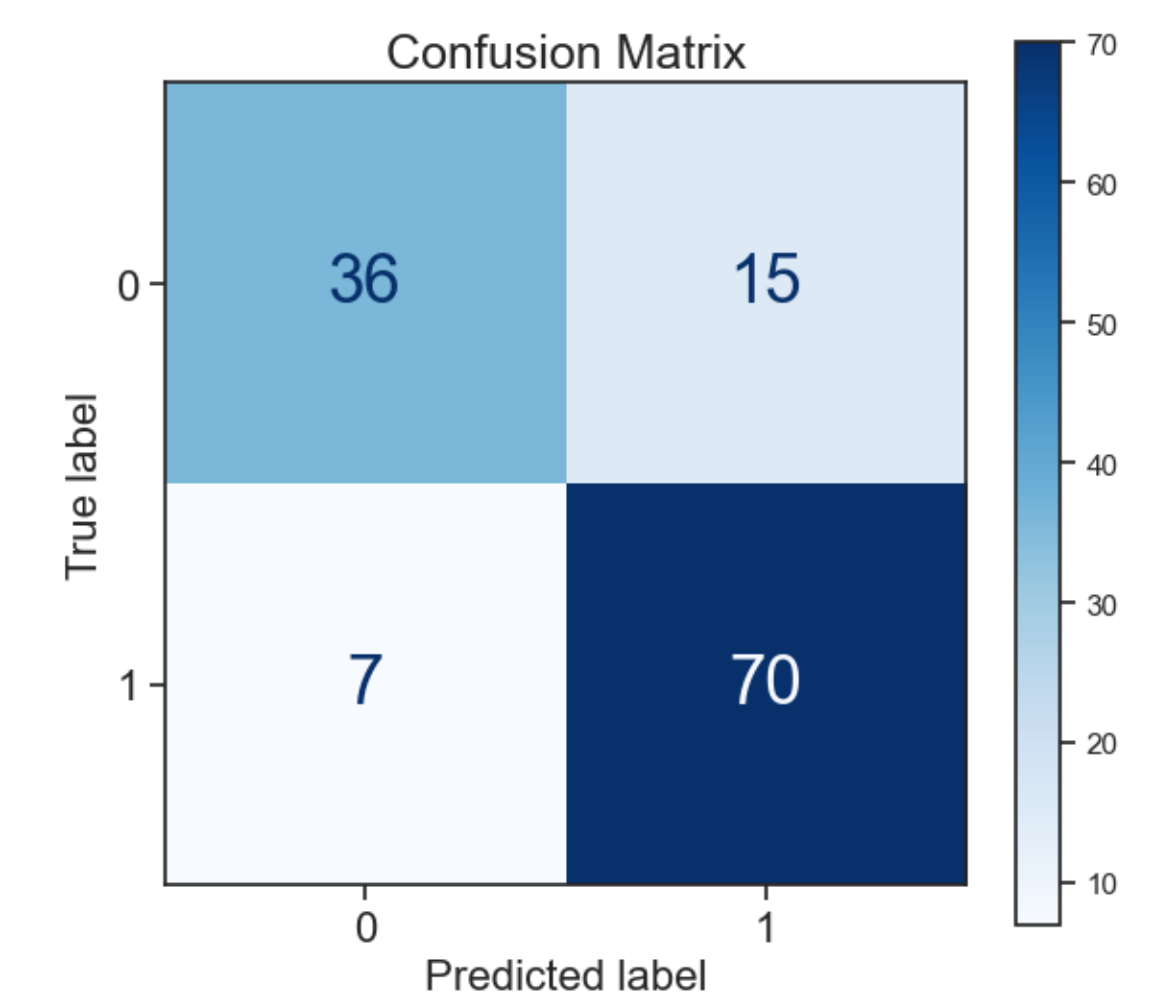


Metric	Train	Test
AUC	0.9975	0.89
accuracy	0.9629	0.8047
balanced accuracy	0.9539	0.7781
recall_(sens)	1.0	0.9091
specificity	0.9078	0.6471
precision	0.9415	0.7955
f1_score	0.9626	0.7994

Protein: P08913 - metric: precision

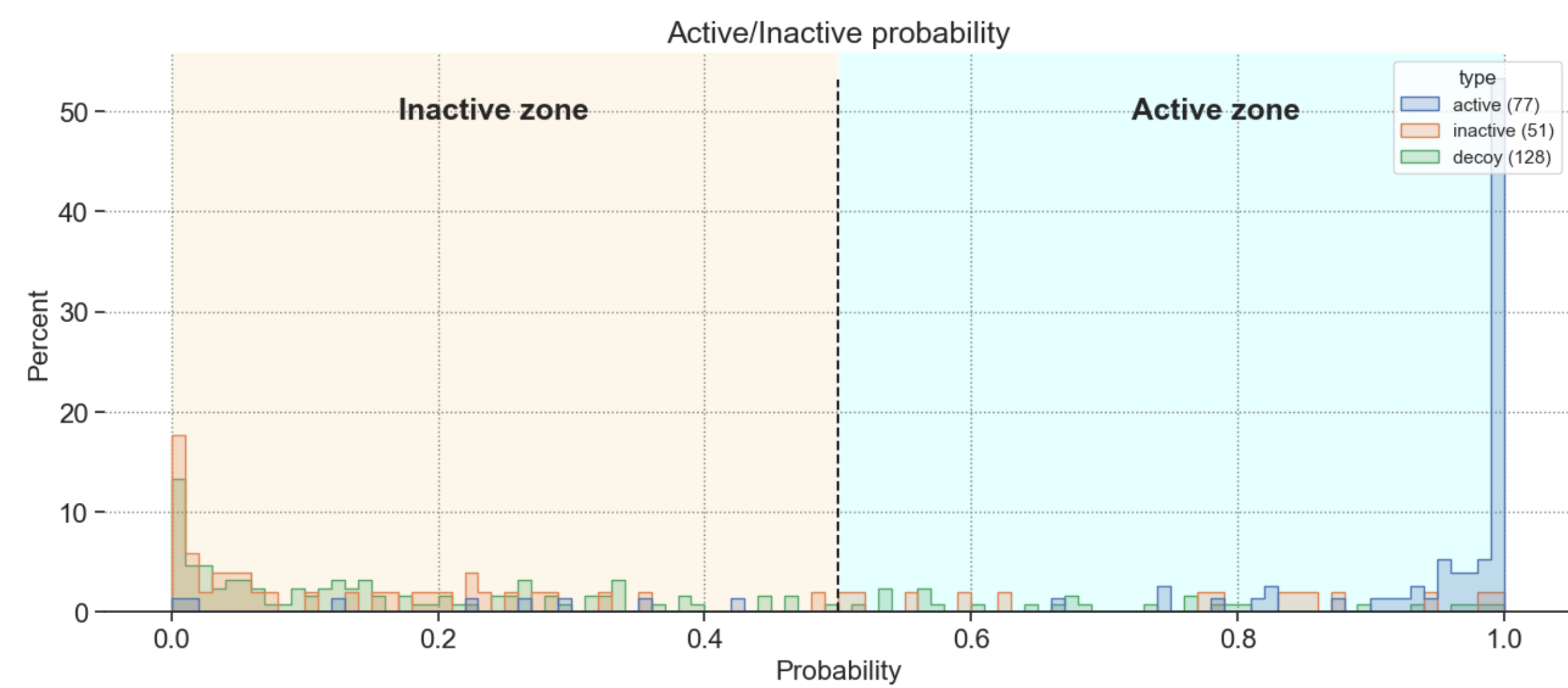
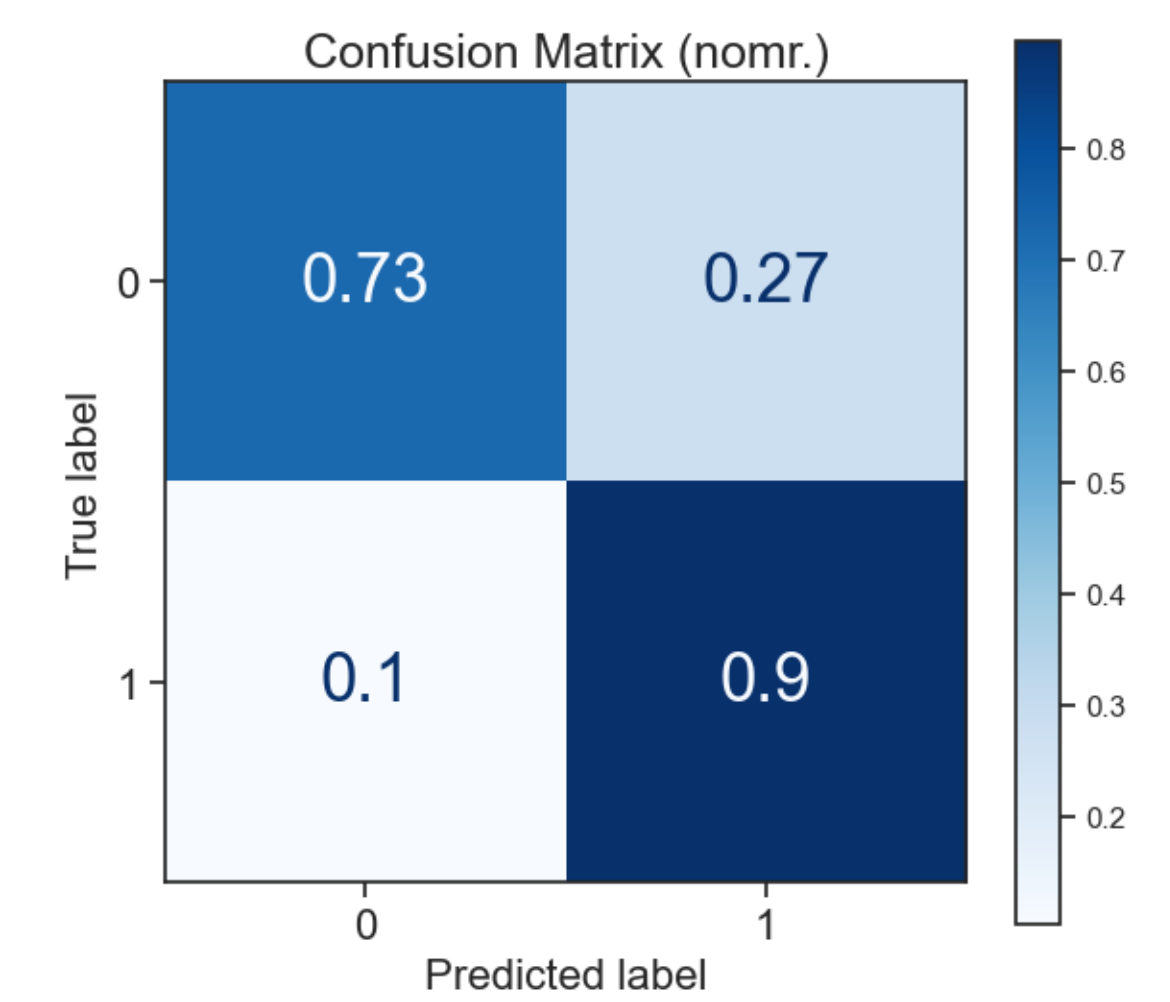
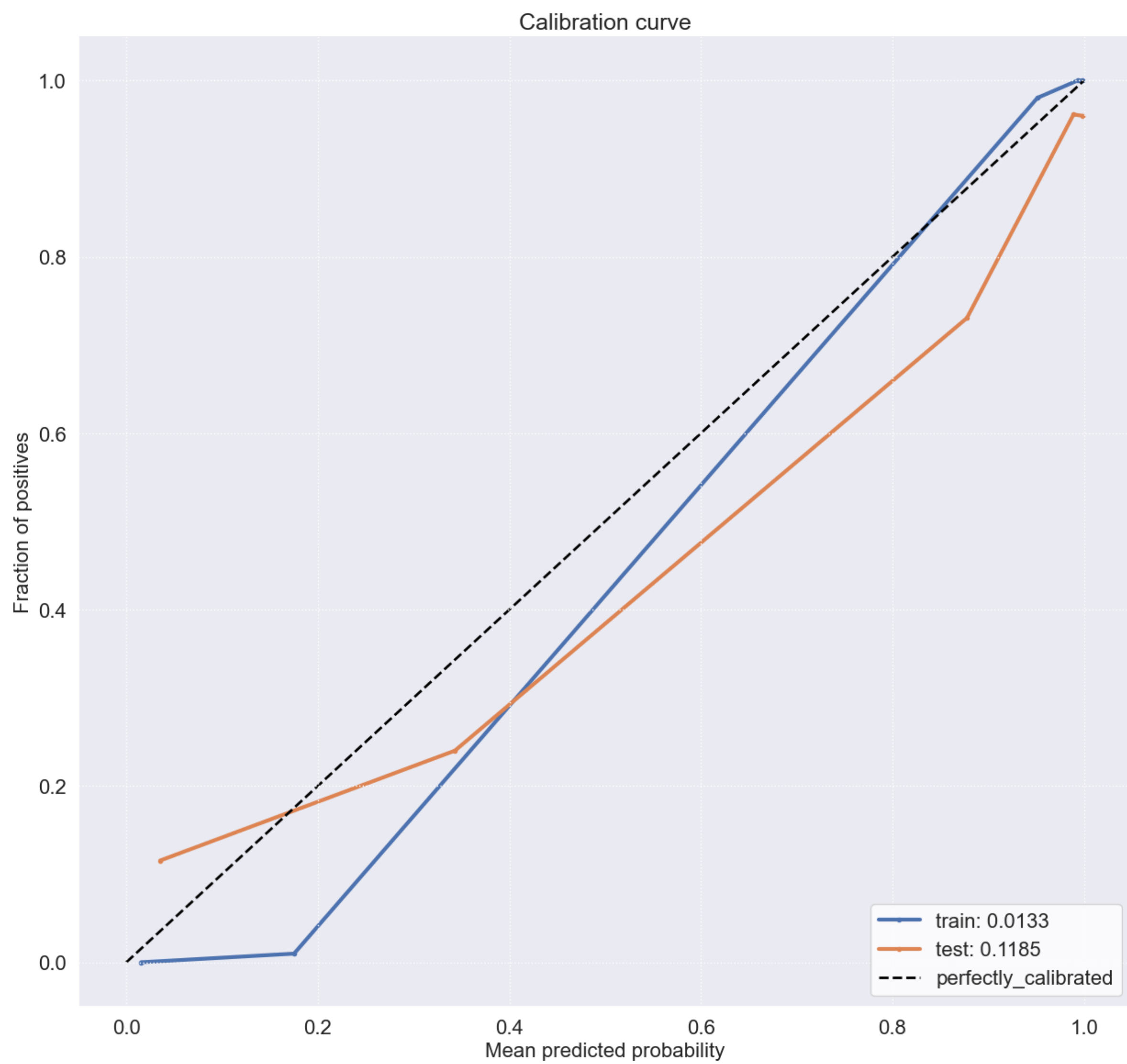
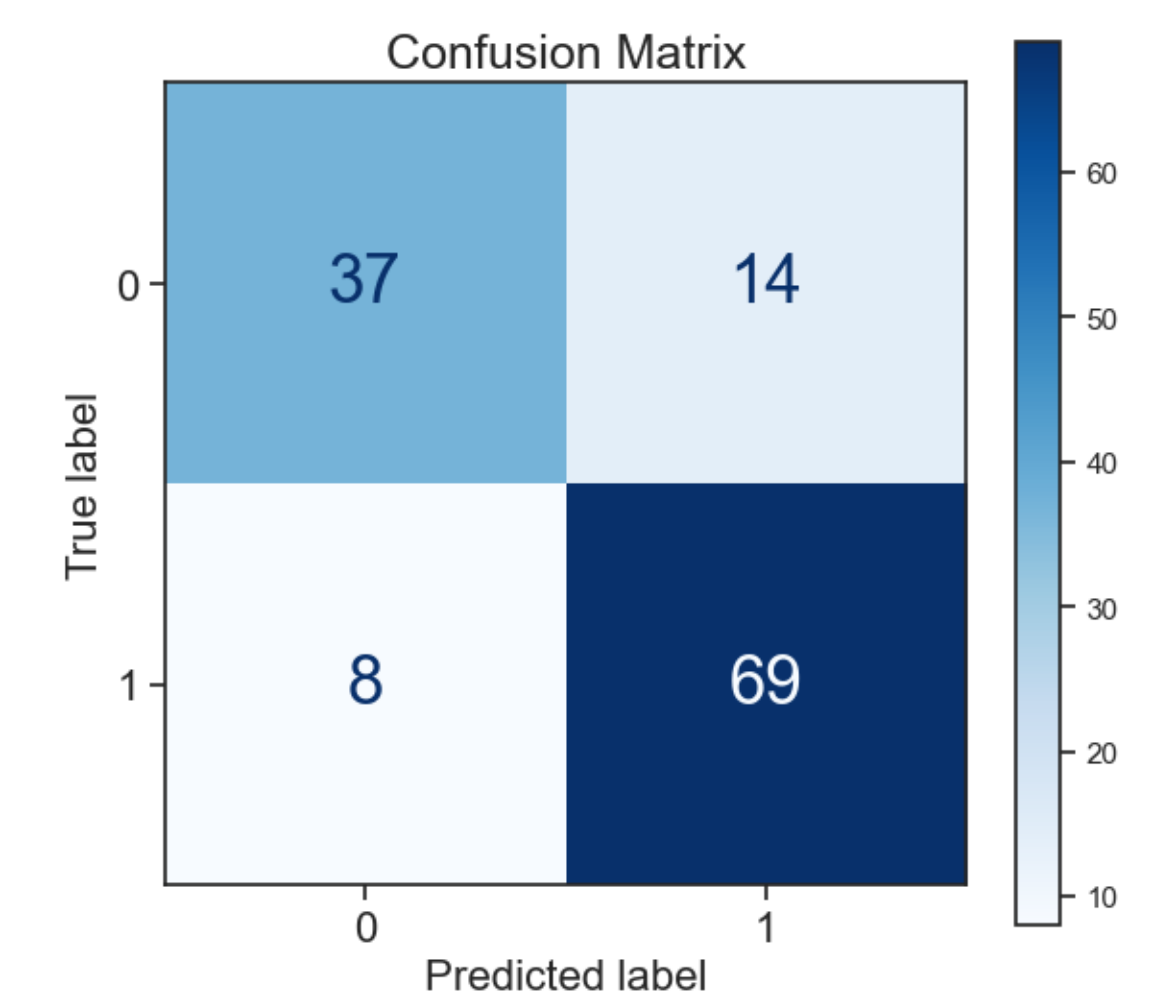
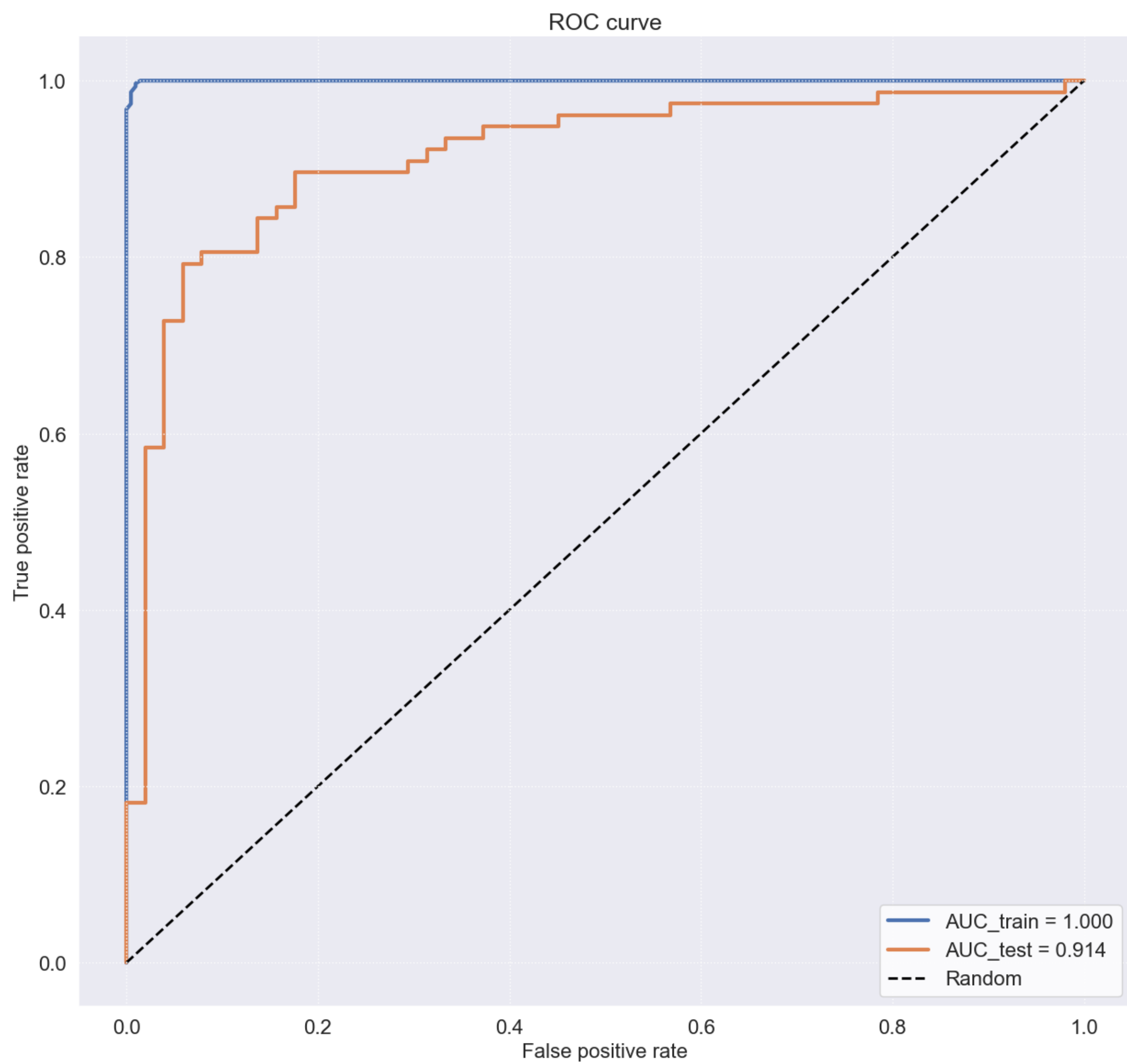
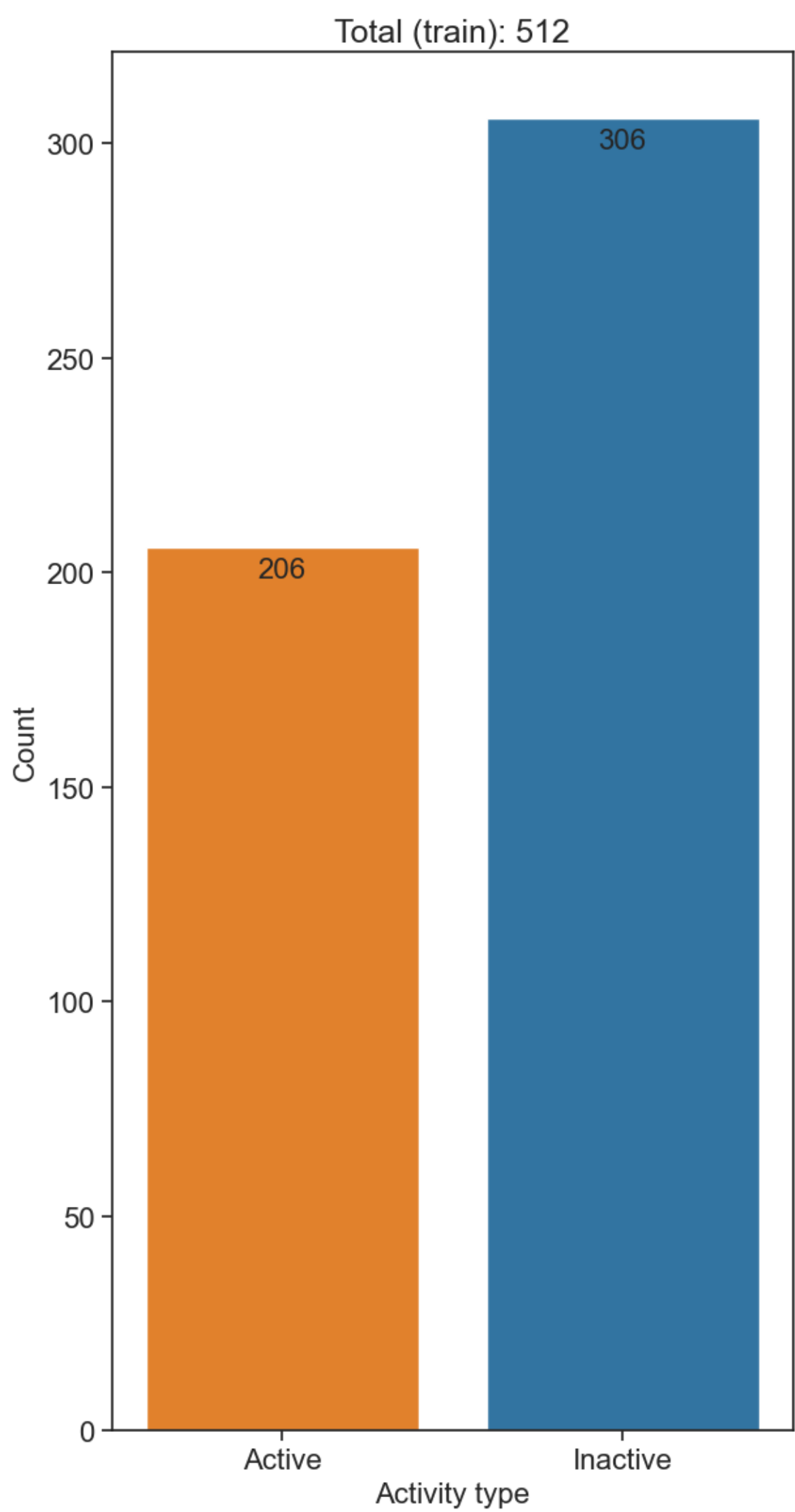


XGBoost Parameters		Value
alpha		0.5444
colsample_bytree		0.8923
gamma		0.6661
lambda		0.4797
learning_rate		0.3955
max_depth		6.0
min_child_weight		1.0
n_estimators		277.0
reg_alpha		0.0992
reg_lambda		0.2534
scale_pos_weight		1.4119
subsample		0.607



Metric	Train	Test
AUC	0.9998	0.9114
accuracy	0.9922	0.8281
balanced accuracy	0.9903	0.8075
recall_(sens)	1.0	0.9091
specificity	0.9806	0.7059
precision	0.9871	0.8235
f1_score	0.9922	0.8251

Protein: P08913 - metric: SoftVotingXGBoostEnsemble



Metric	Train	Test
AUC	0.9998	0.9142
accuracy	0.9902	0.8281
balanced accuracy	0.9879	0.8108
recall_(sens)	1.0	0.8961
specificity	0.9757	0.7255
precision	0.9839	0.8313
f1_score	0.9902	0.826