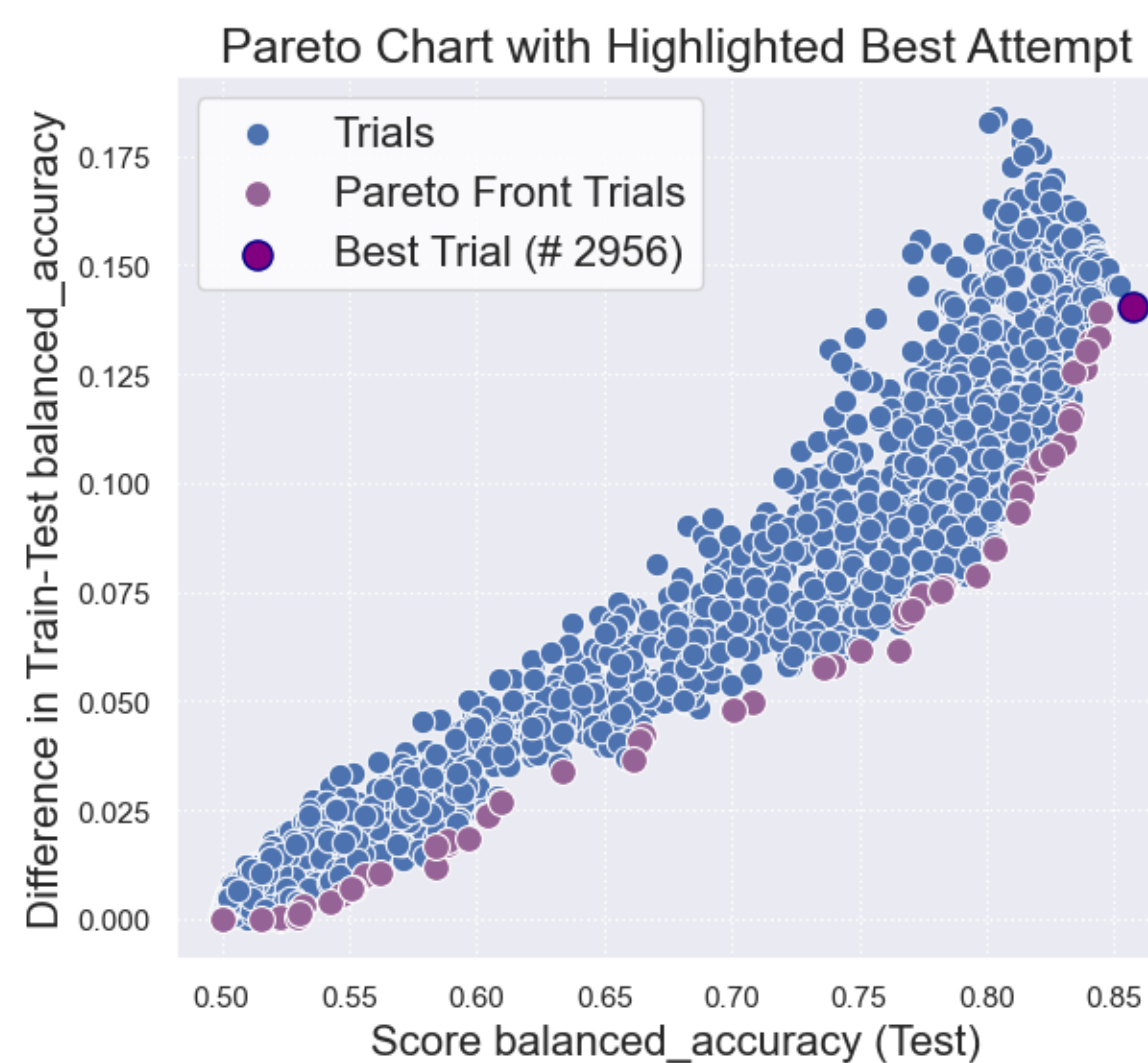
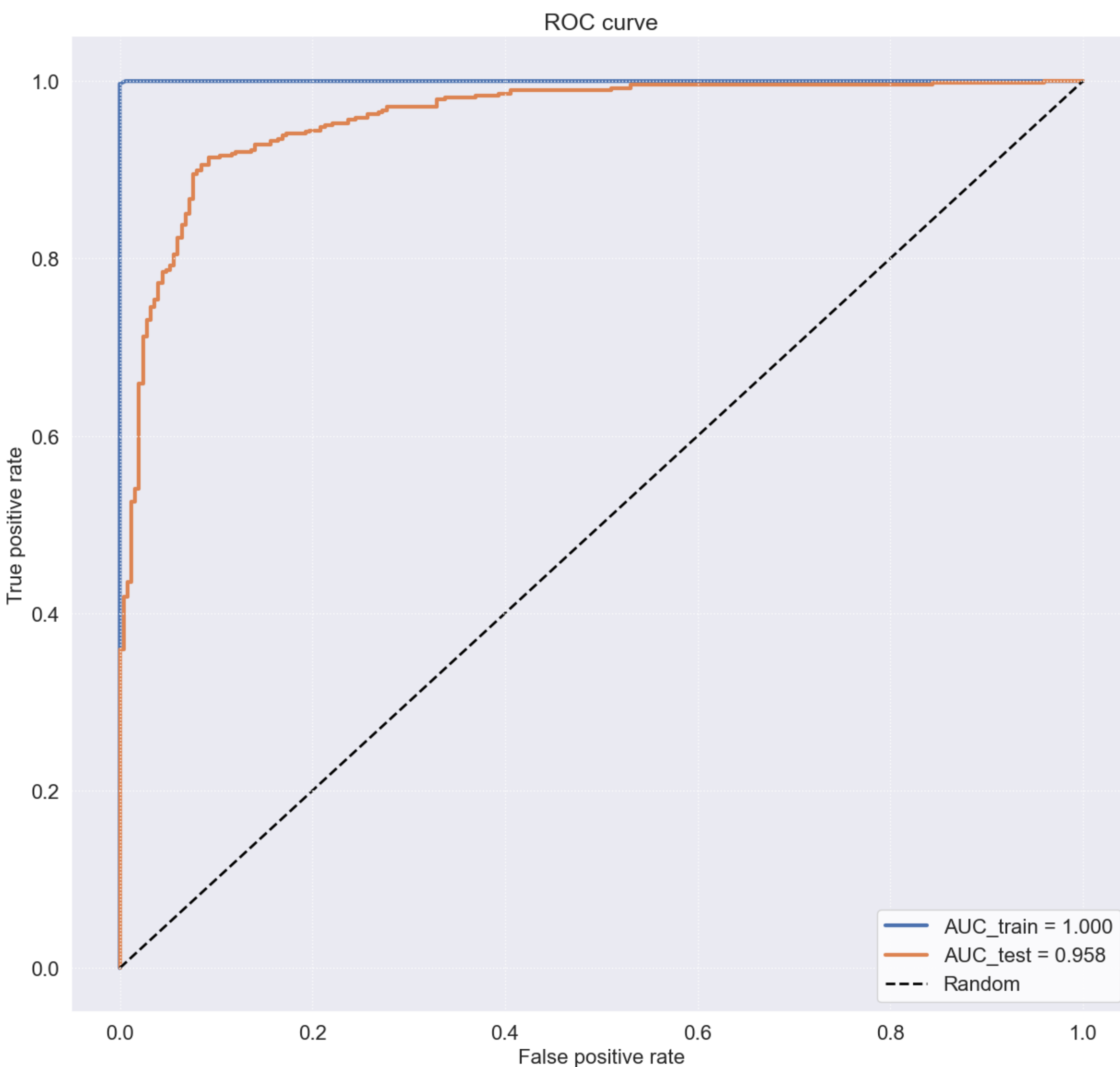
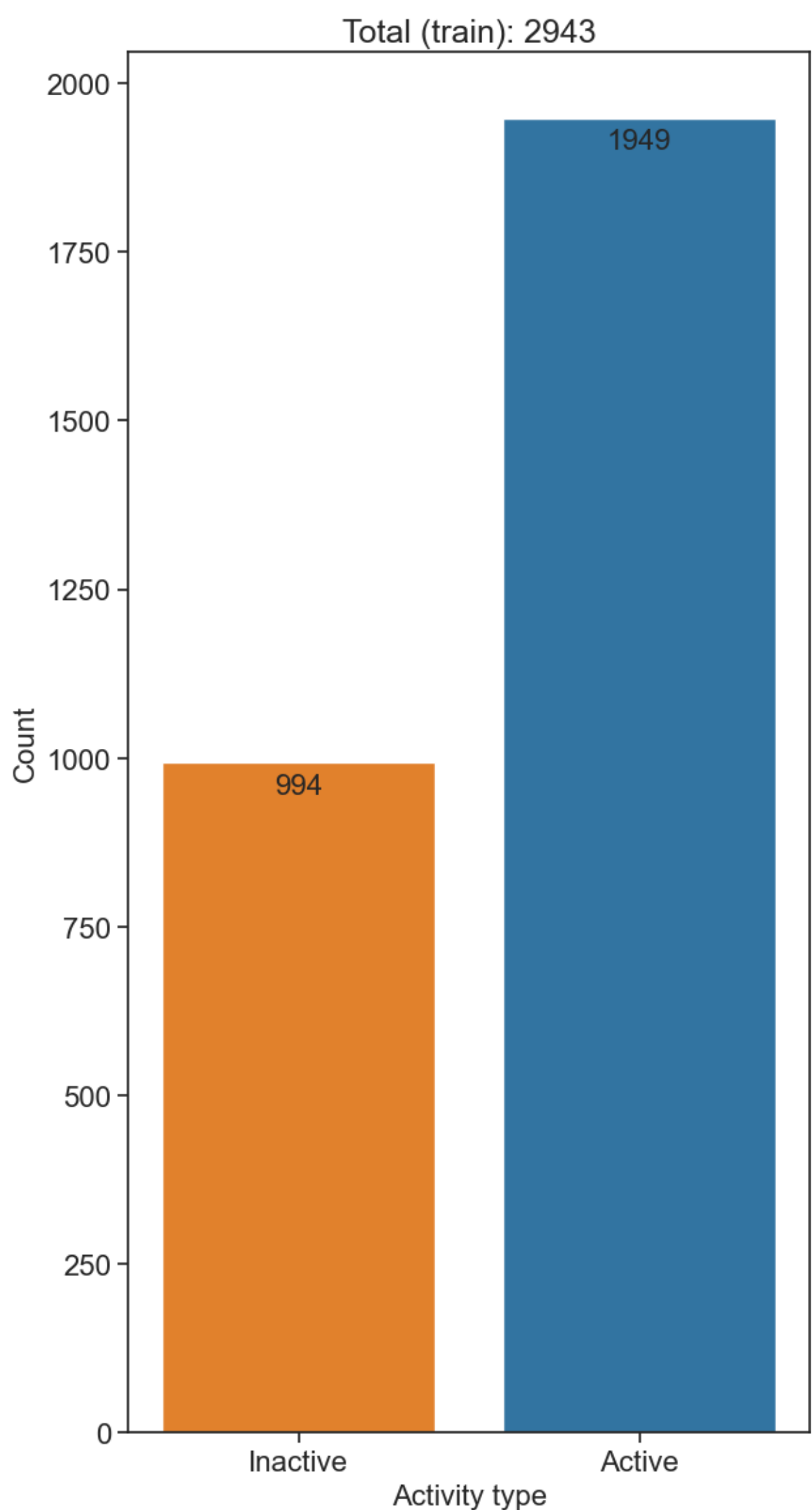
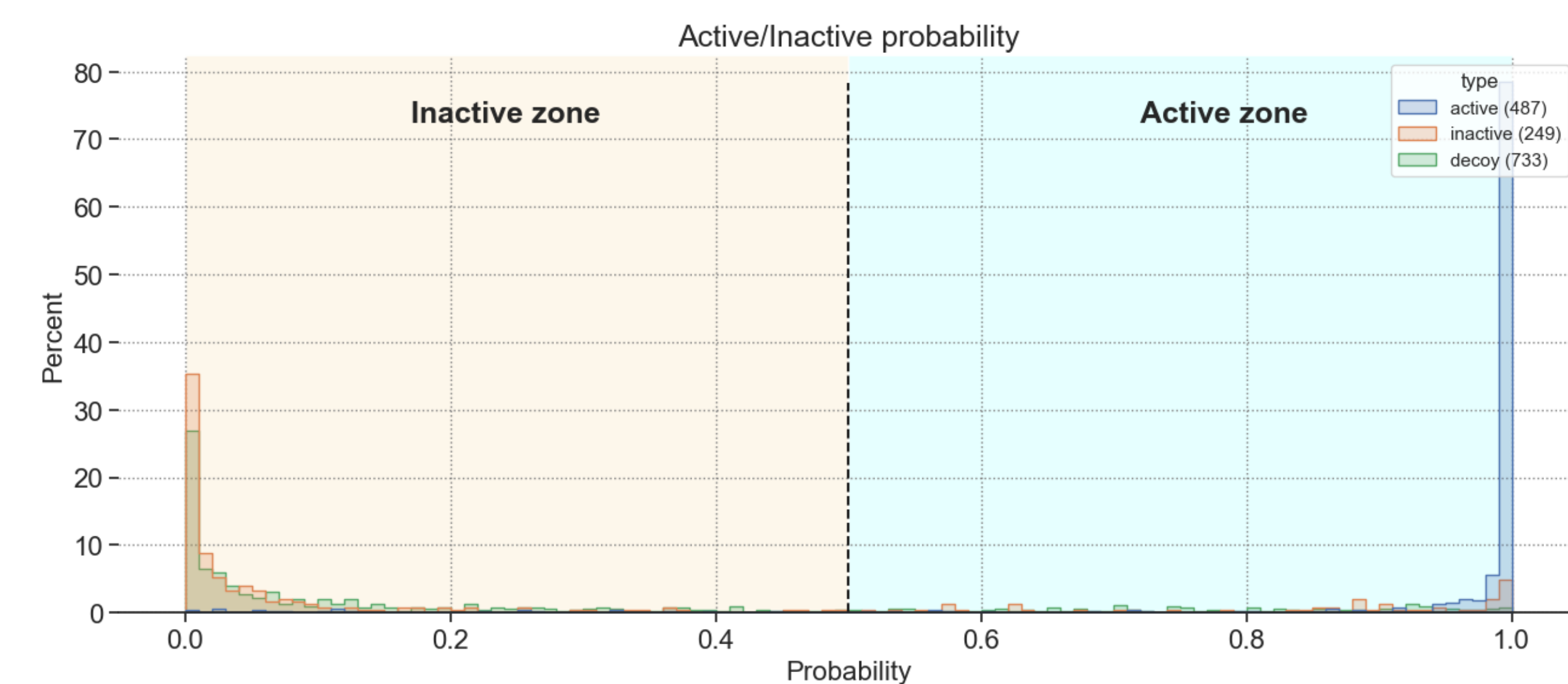
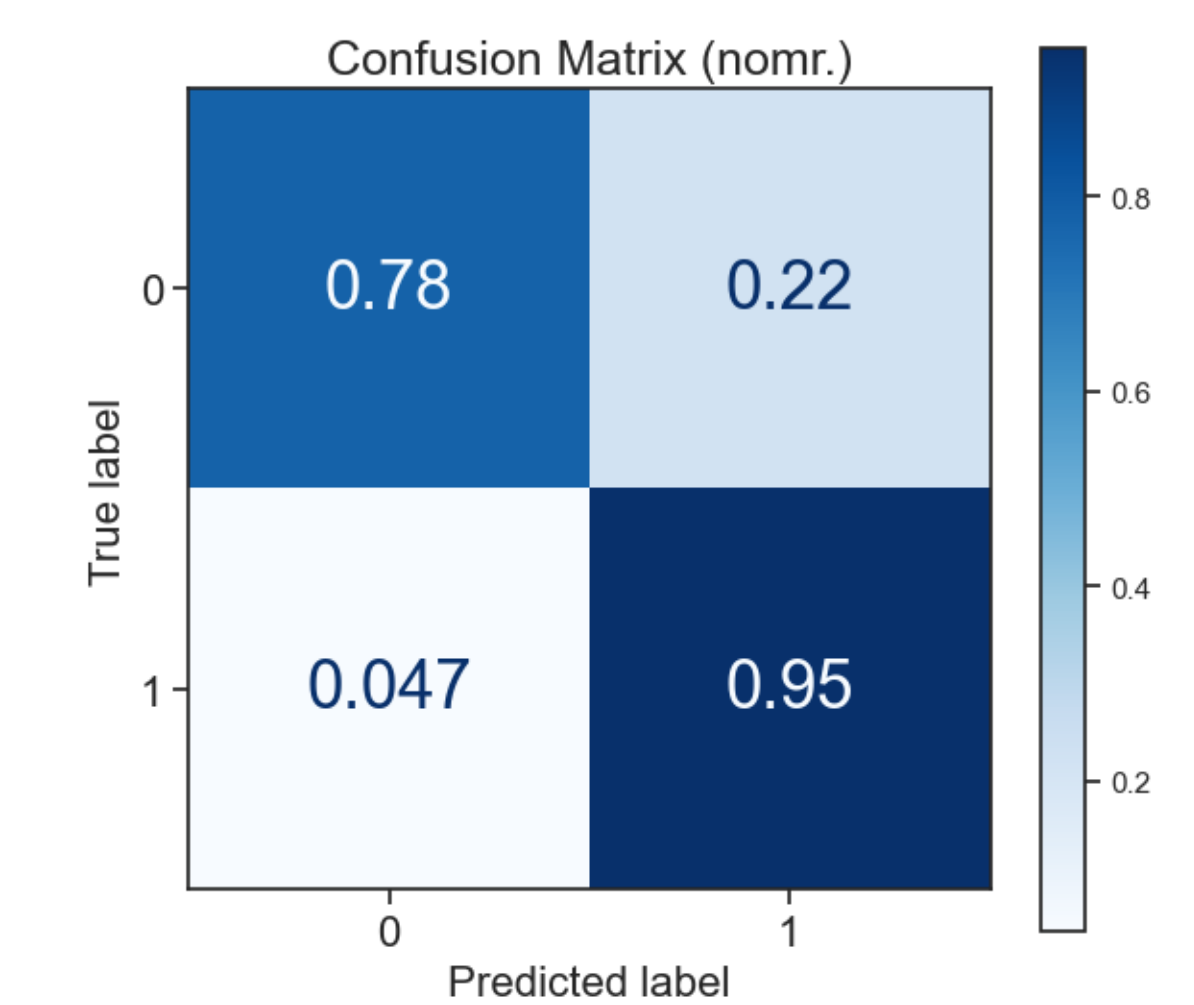
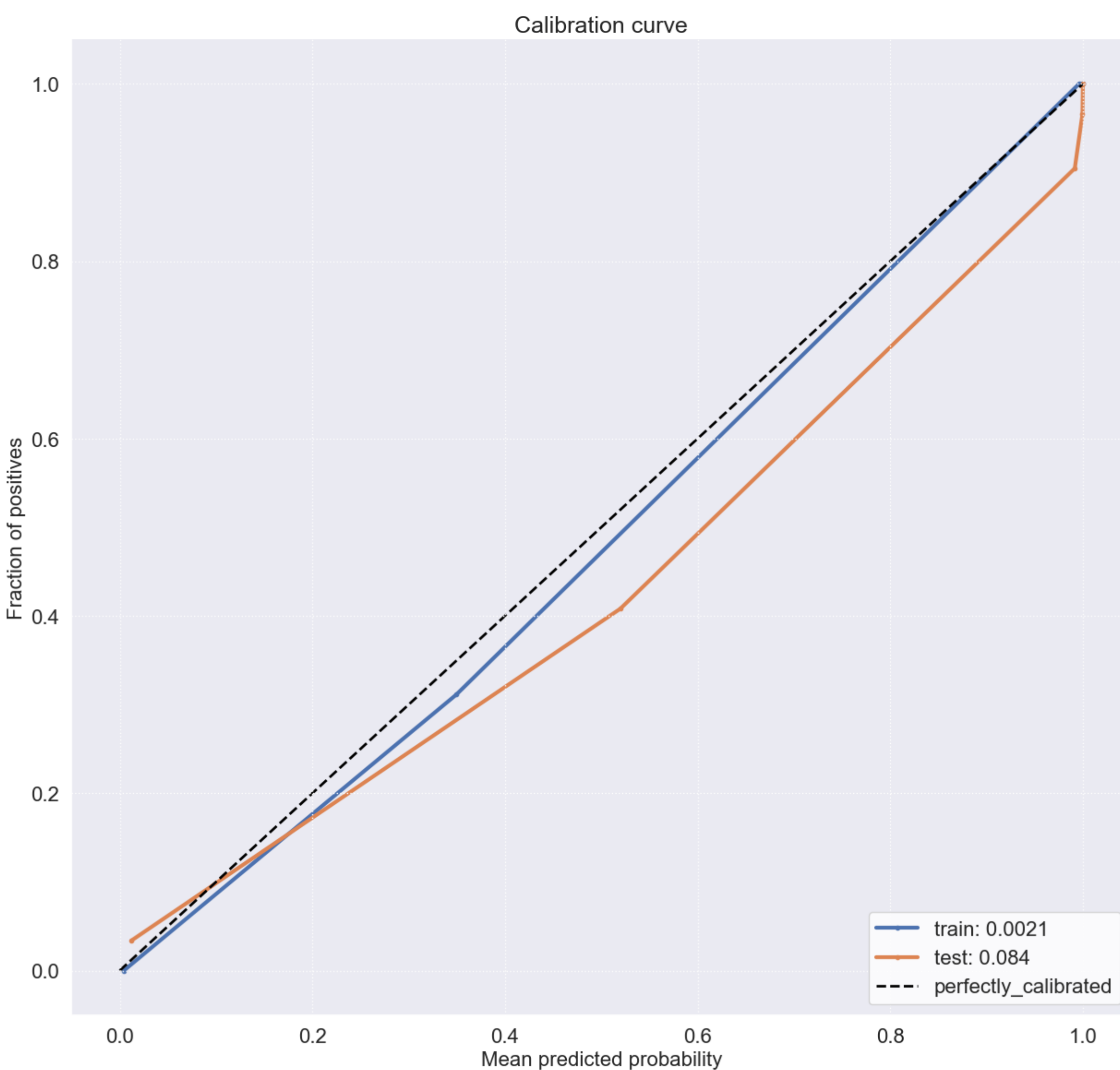
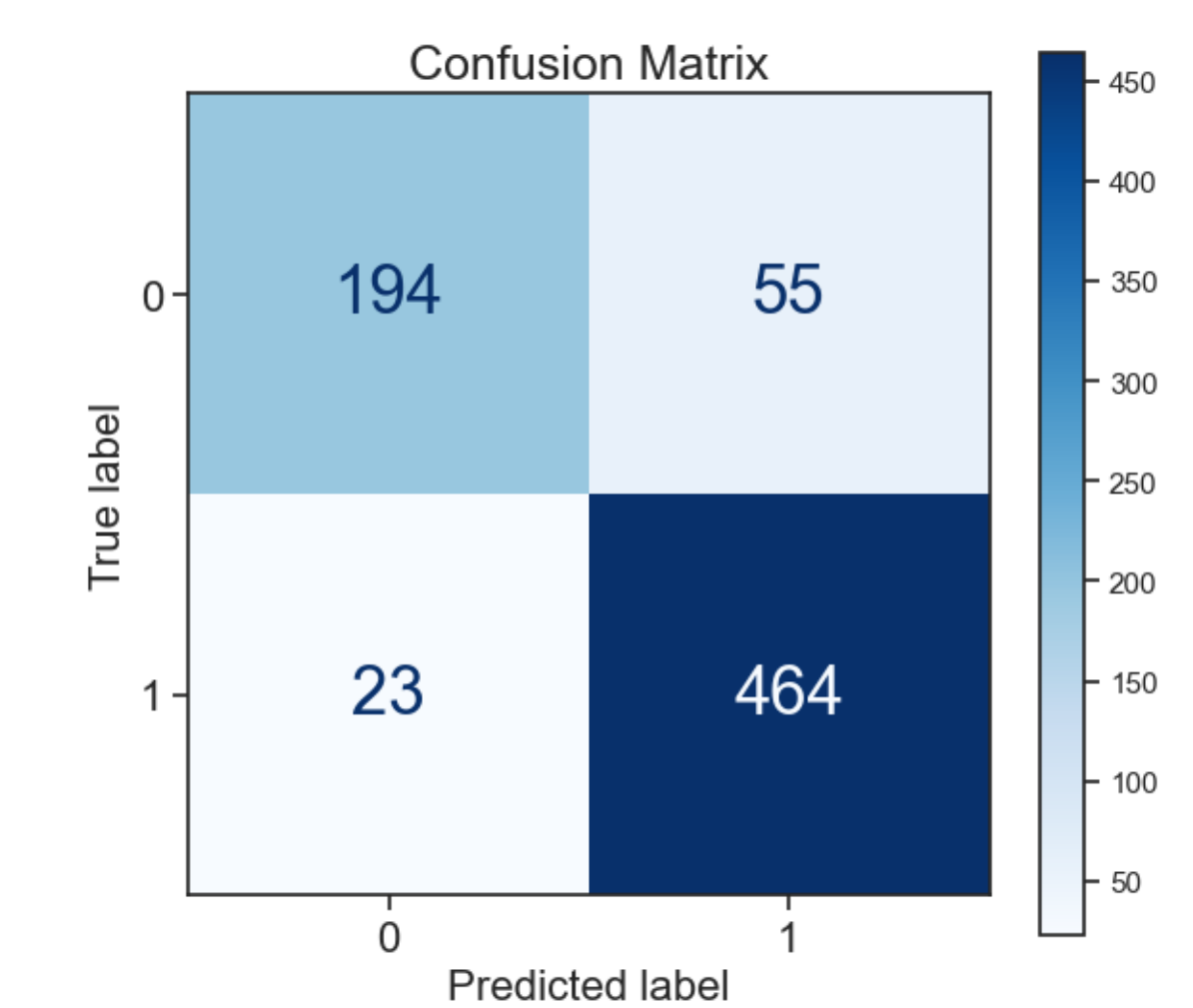


Protein: P21554 - metric: balanced_accuracy

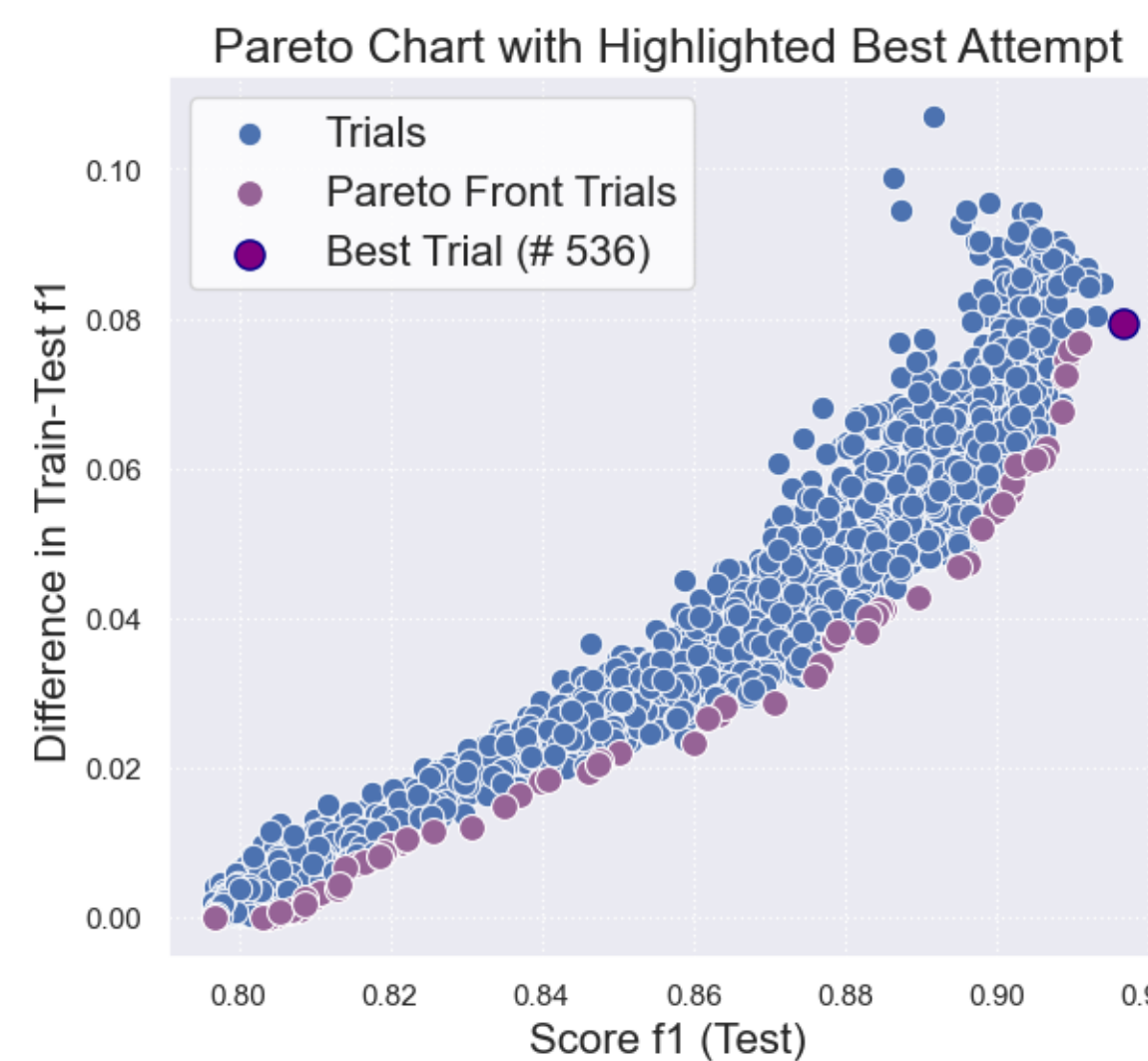
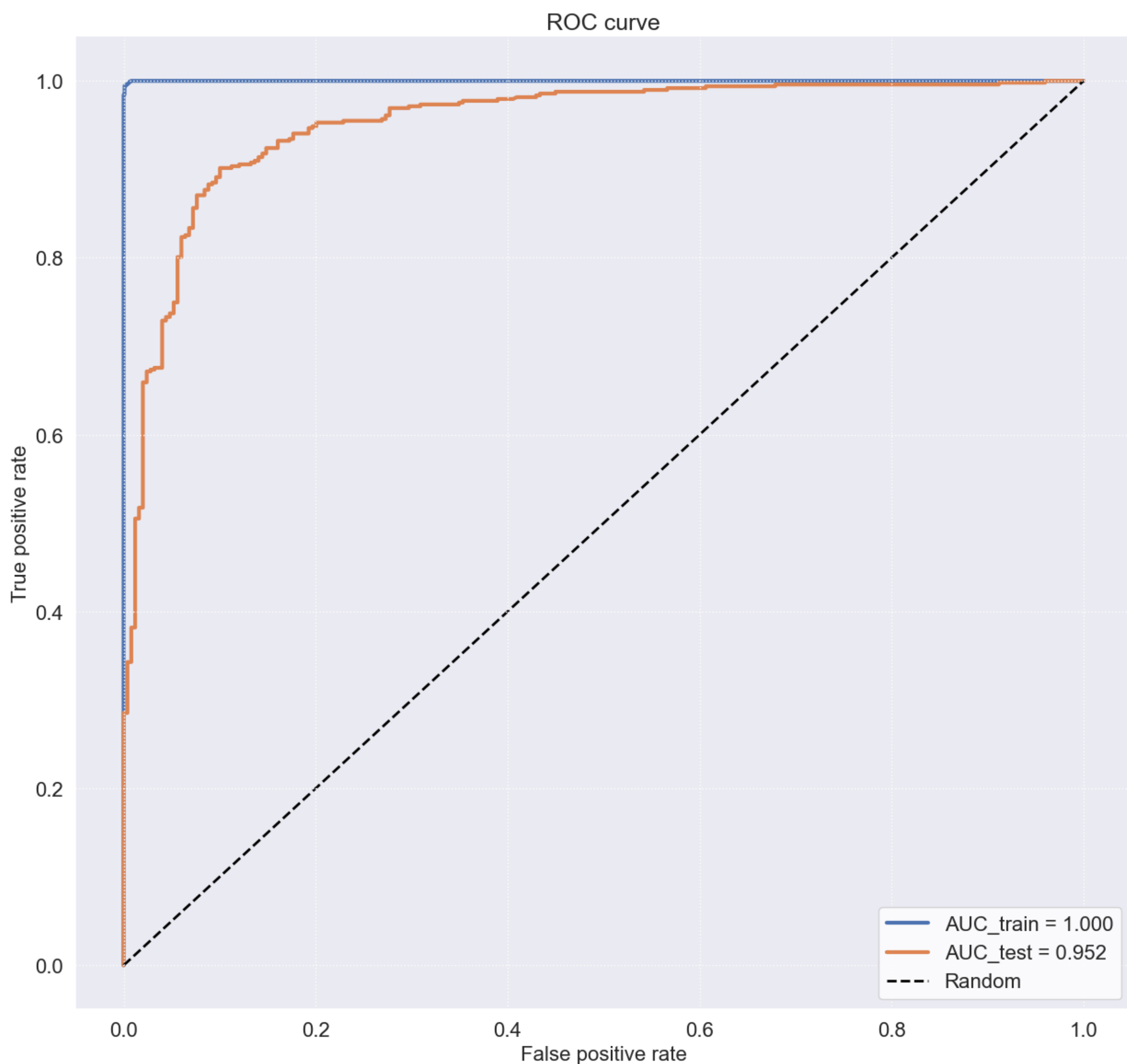
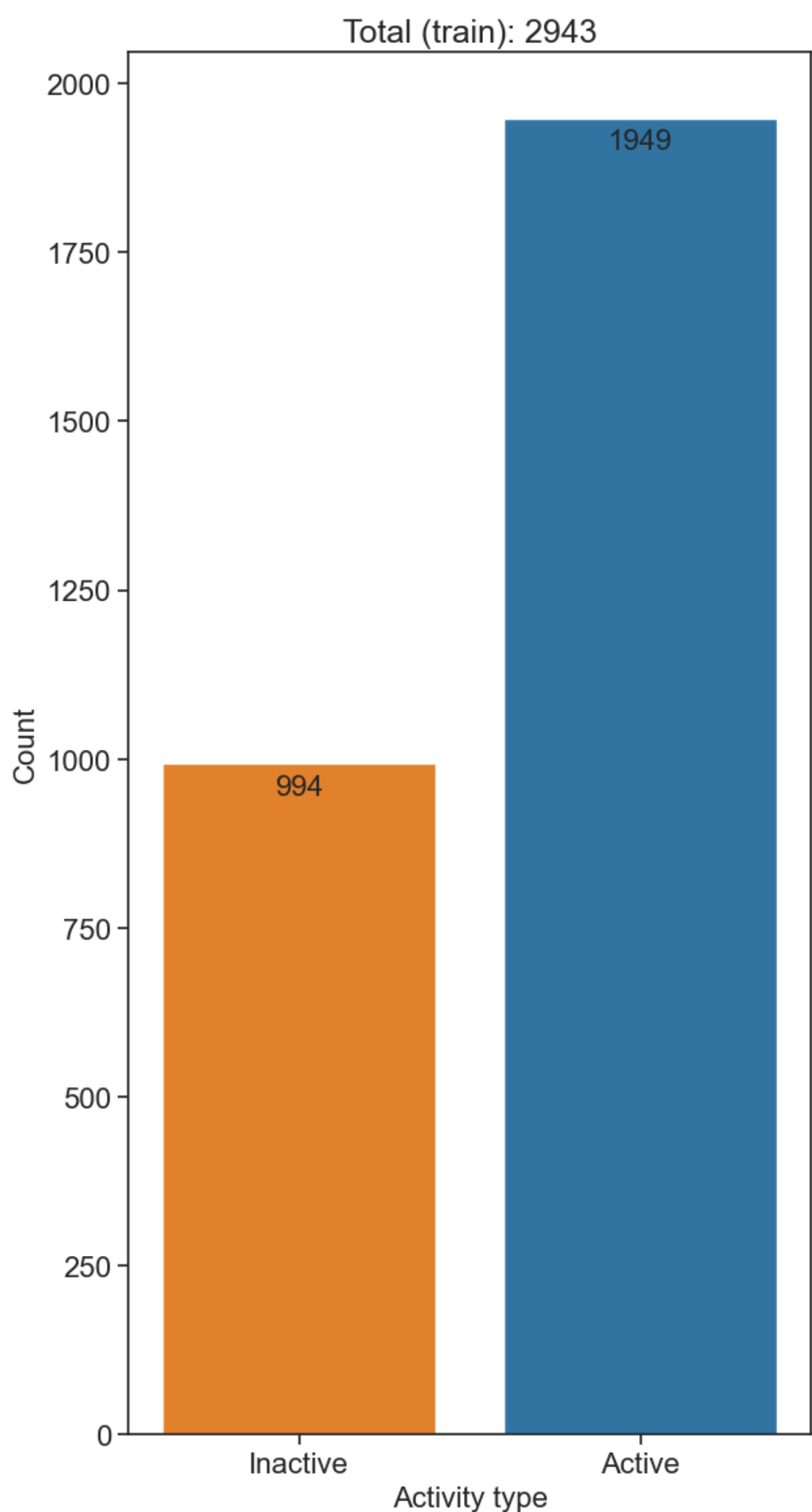


XGBoost Parameters		Value
alpha		1.0245
colsample_bytree		0.646
gamma		0.0009
lambda		3.8996
learning_rate		0.1684
max_depth		10.0
min_child_weight		2.0
n_estimators		833.0
reg_alpha		0.3097
reg_lambda		0.1378
scale_pos_weight		4.0942
subsample		0.8821

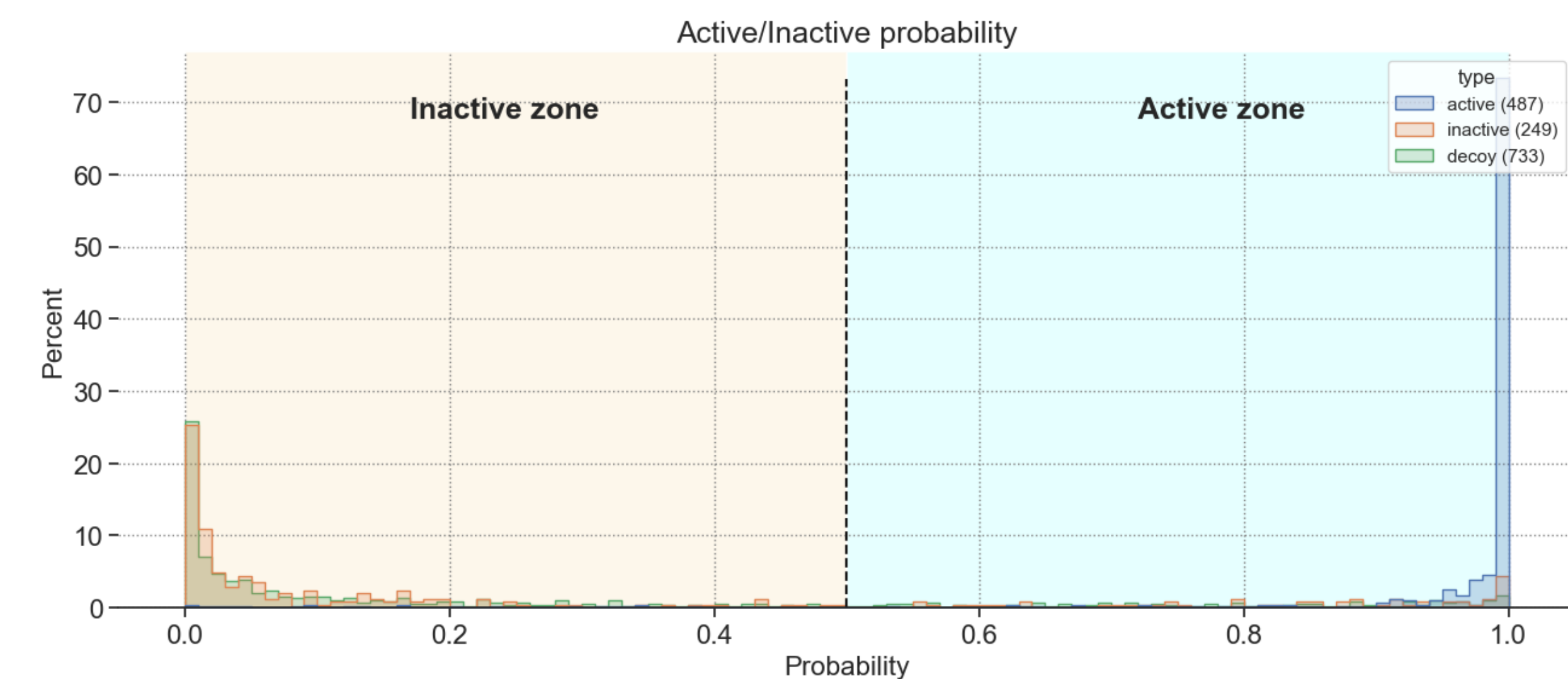
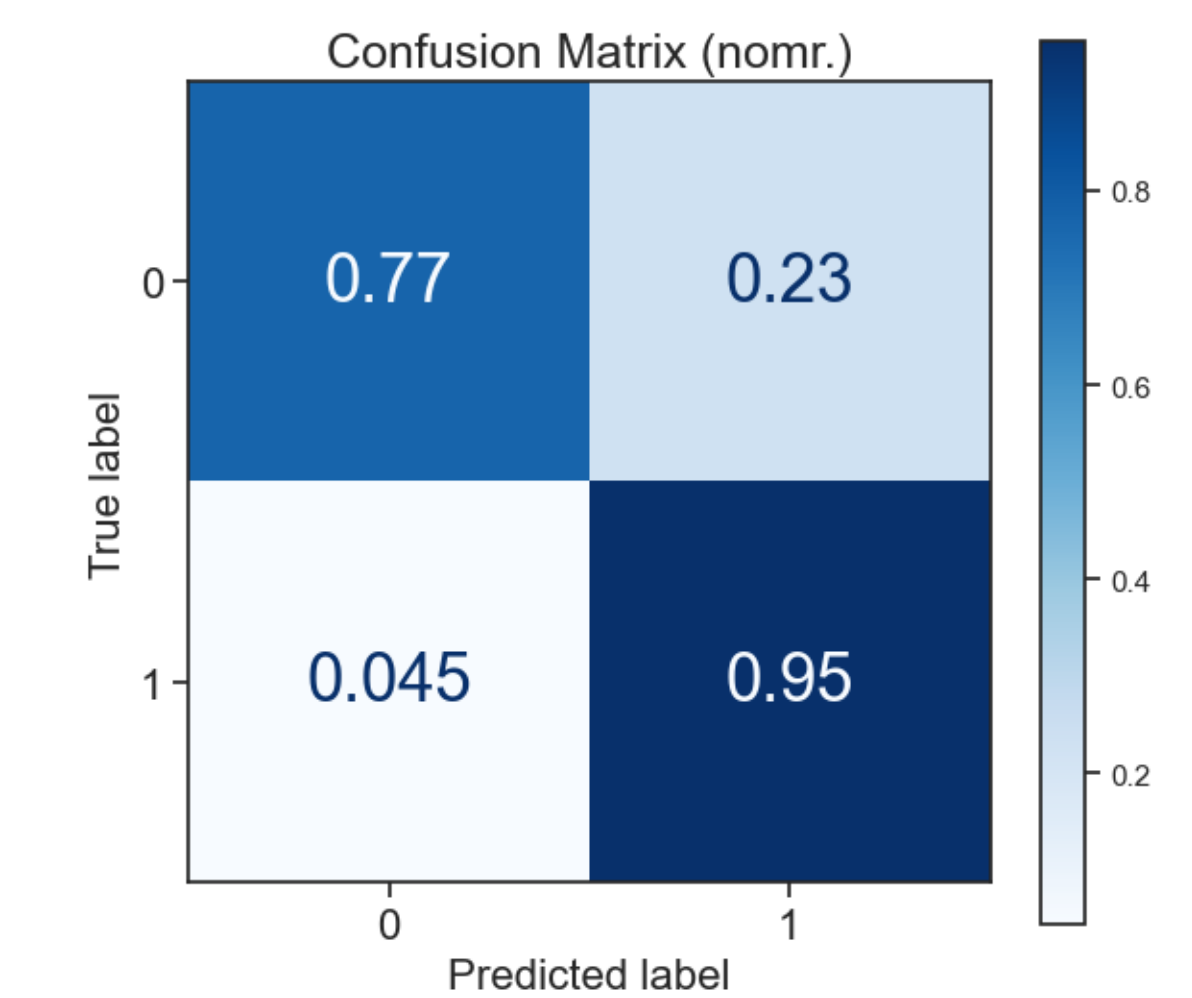
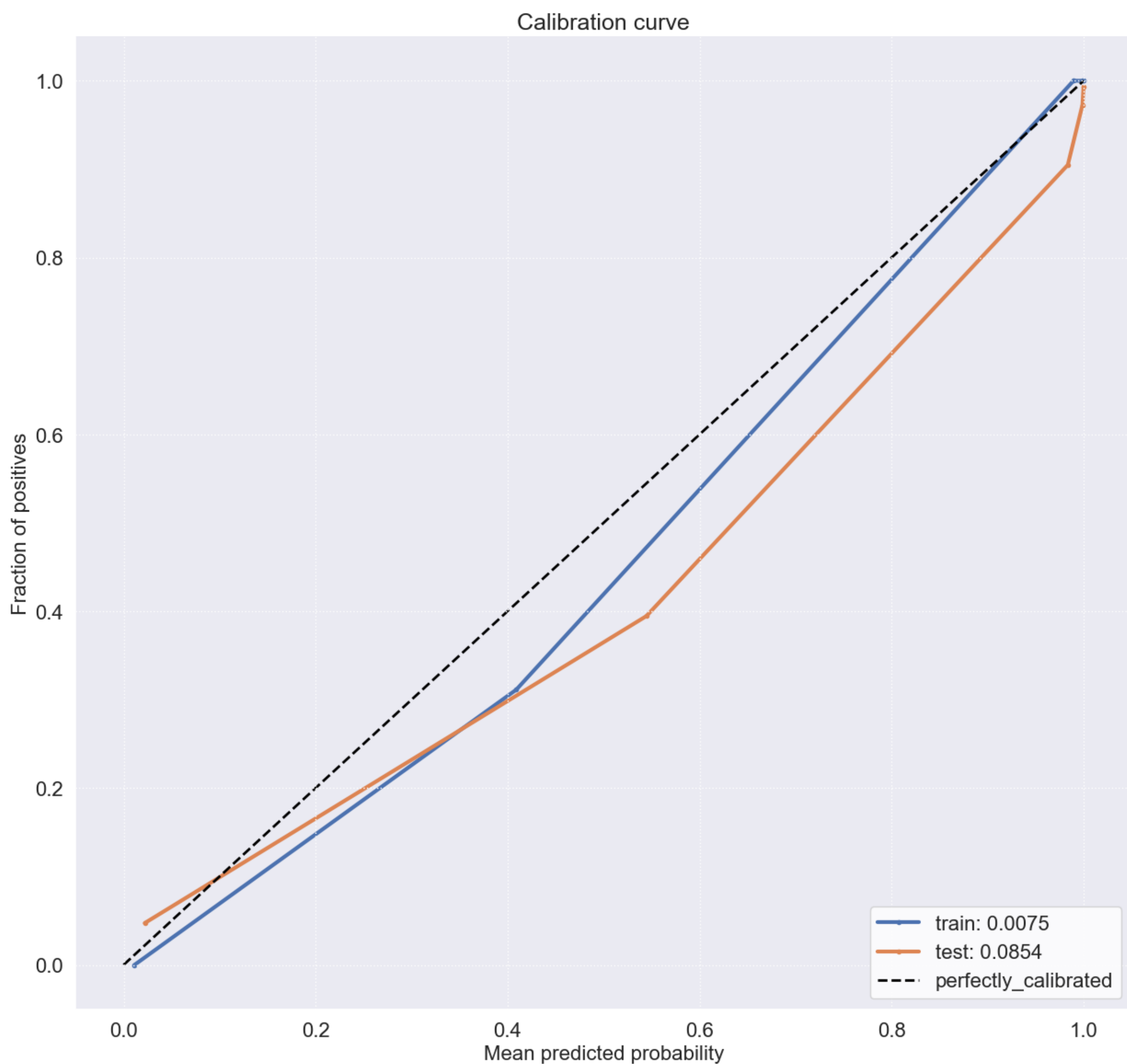
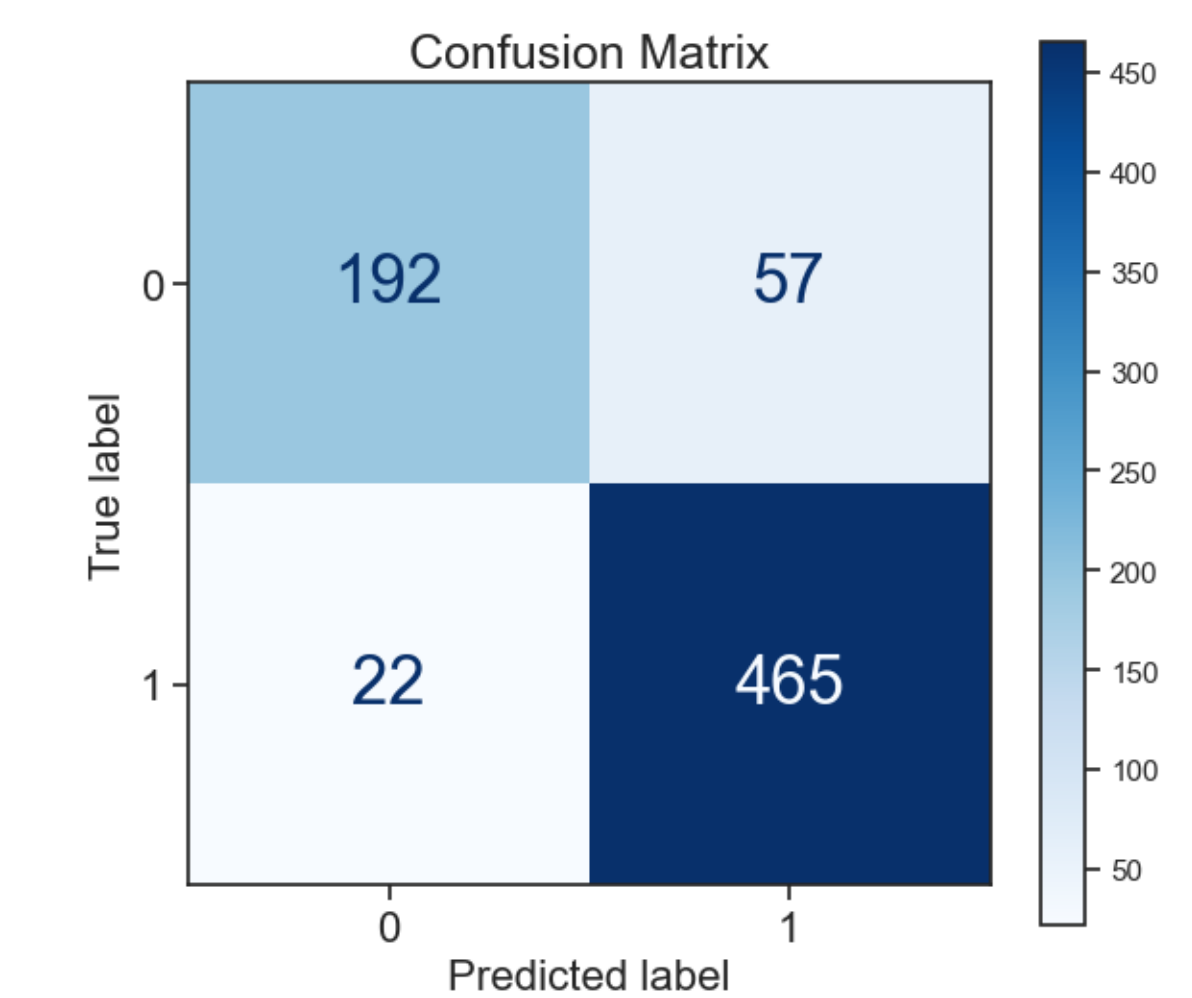


Metric	Train	Test
AUC	1.0	0.9583
accuracy	0.998	0.894
balanced accuracy	0.997	0.8659
recall_(sens)	1.0	0.9528
specificity	0.994	0.7791
precision	0.9969	0.894
f1_score	0.998	0.8921

Protein: P21554 - metric: f1

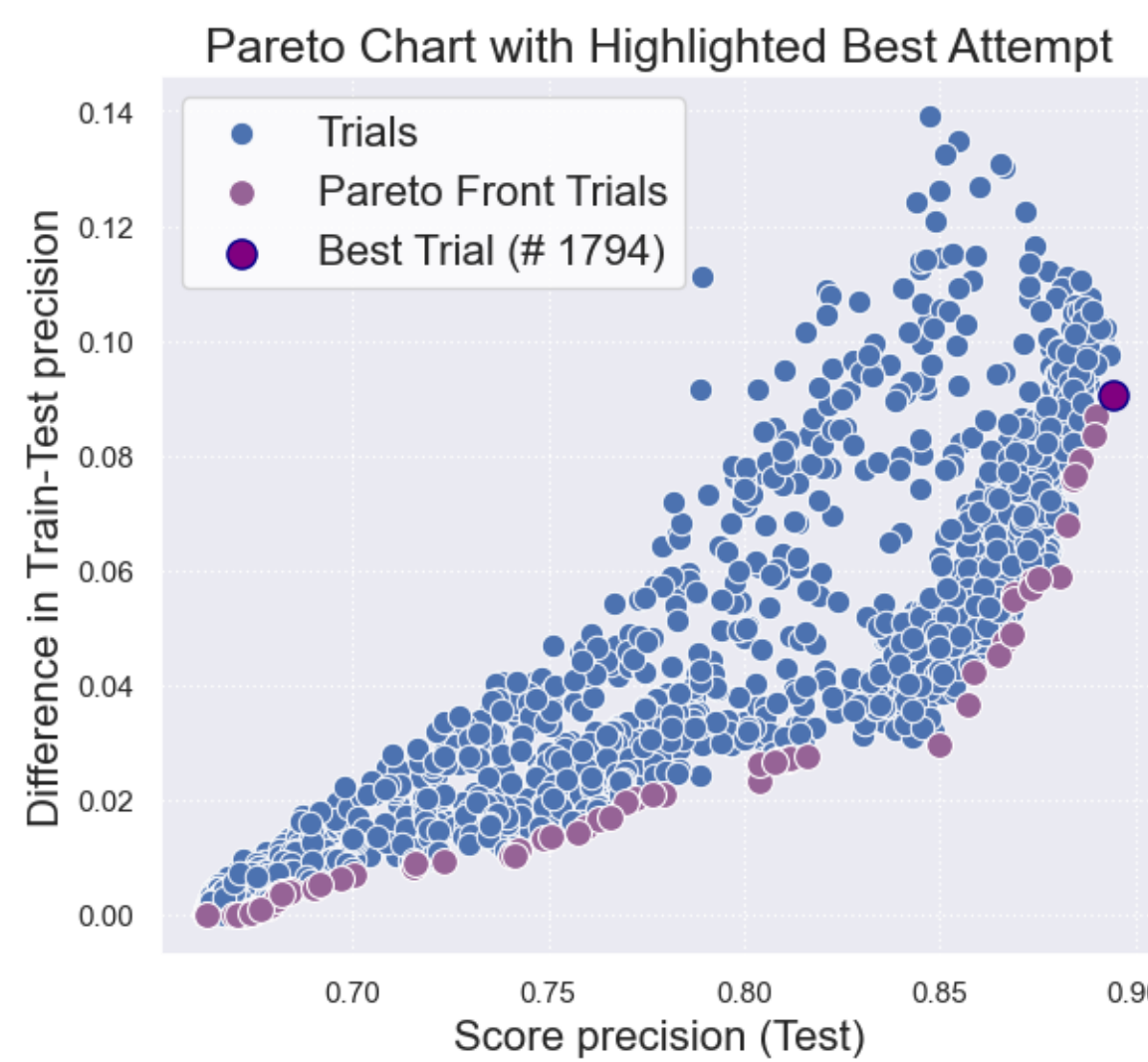
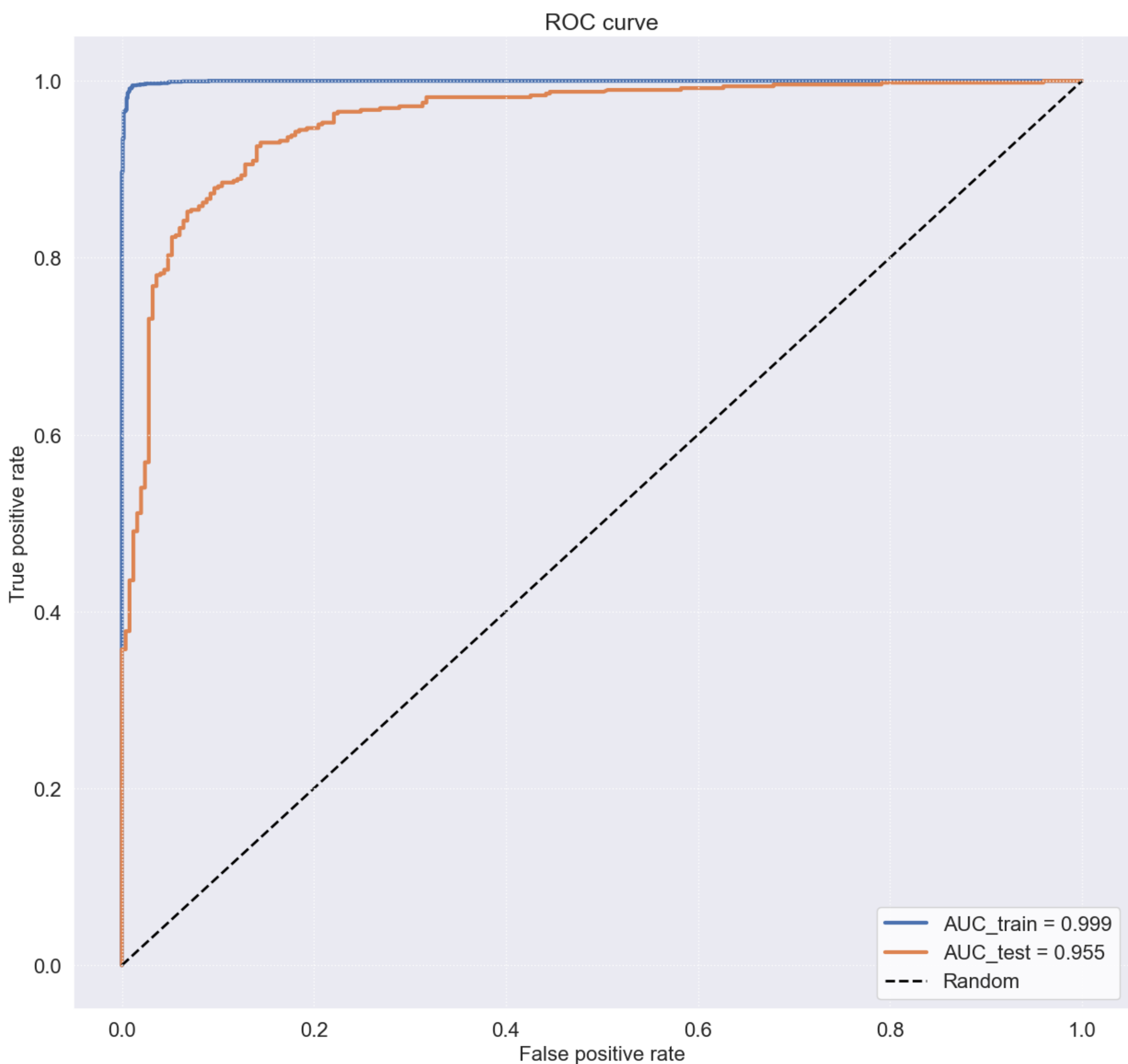
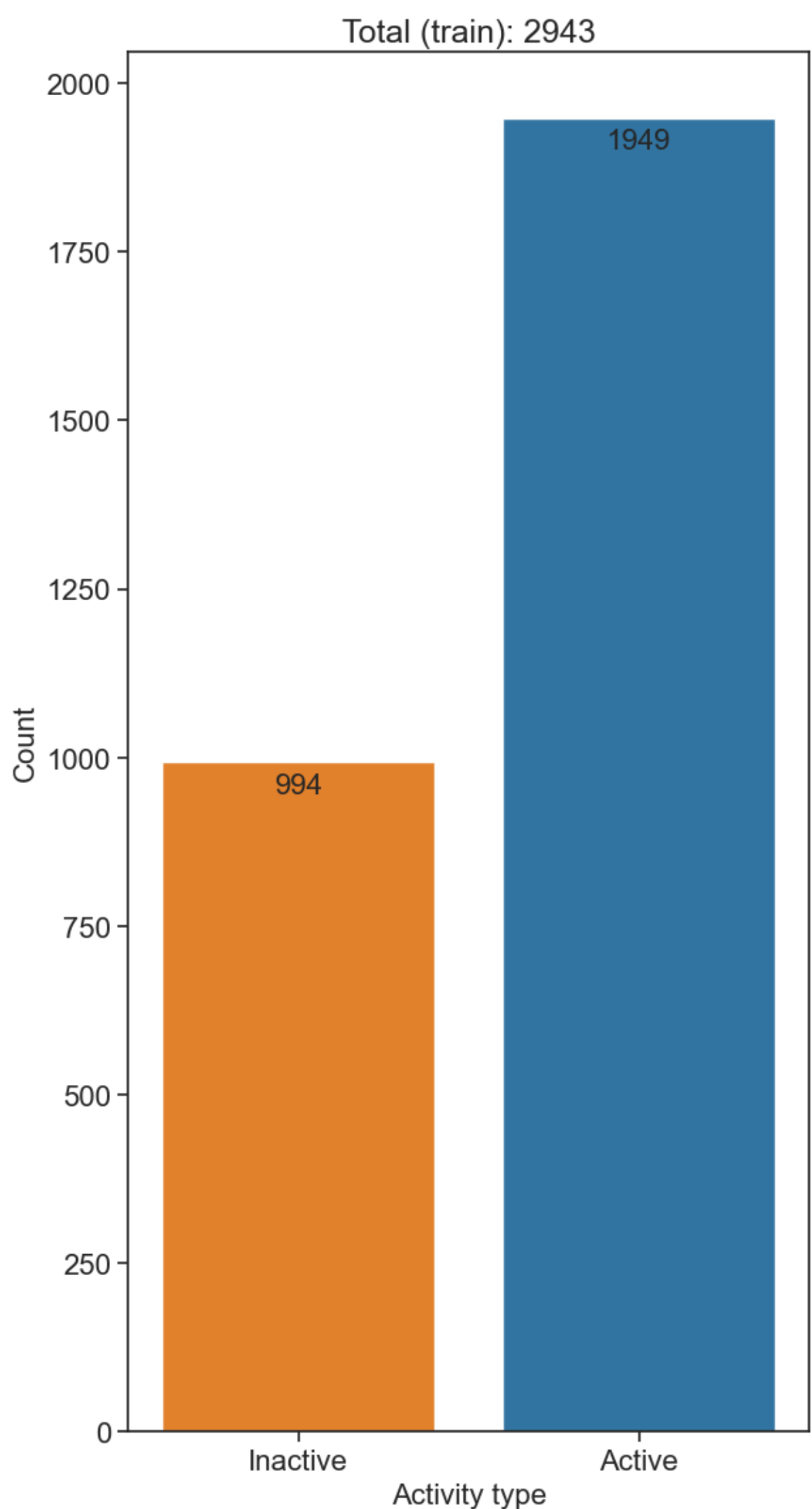


XGBoost Parameters	Value
alpha	0.6166
colsample_bytree	0.9939
gamma	0.0022
lambda	2.3202
learning_rate	0.2396
max_depth	7.0
min_child_weight	6.0
n_estimators	784.0
reg_alpha	0.2377
reg_lambda	0.5569
scale_pos_weight	4.3505
subsample	0.6757

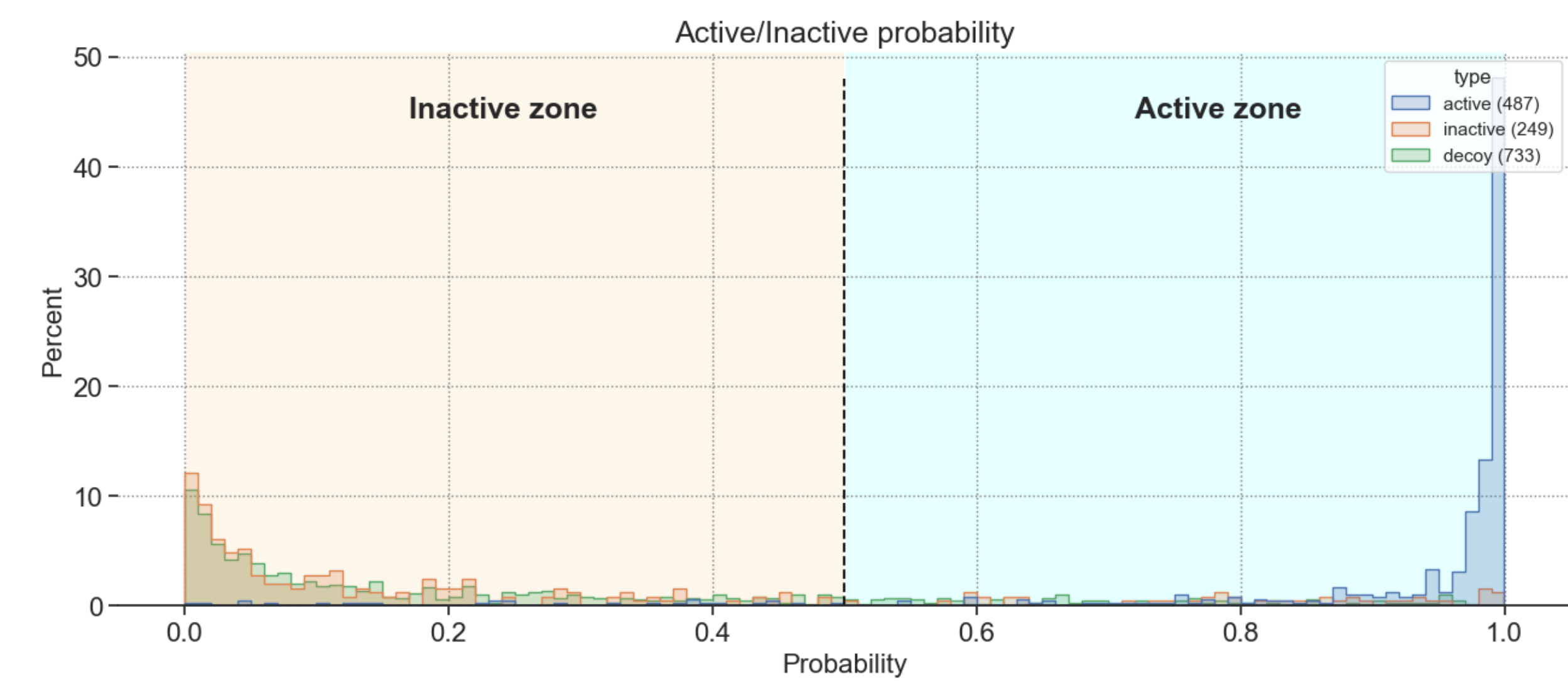
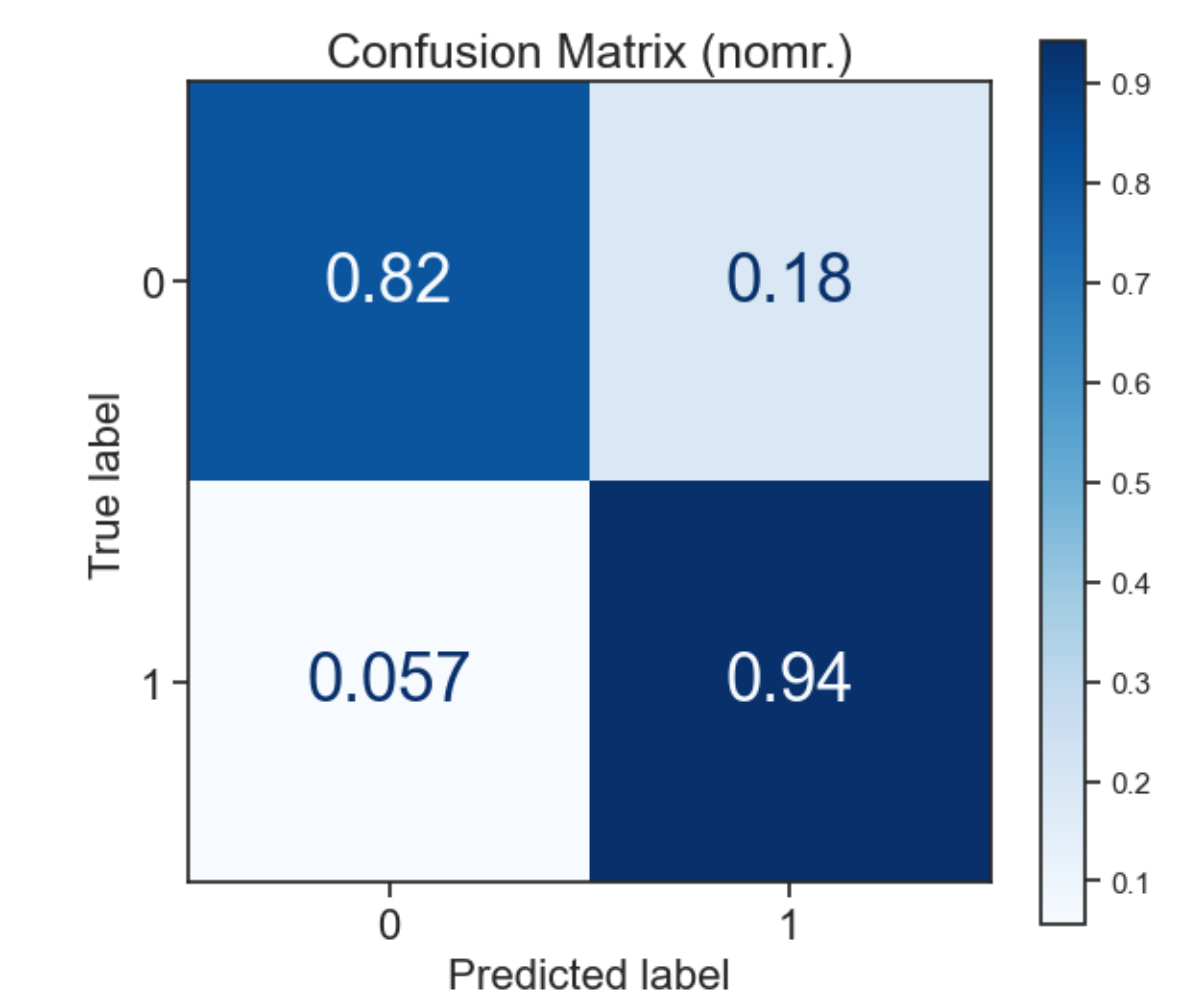
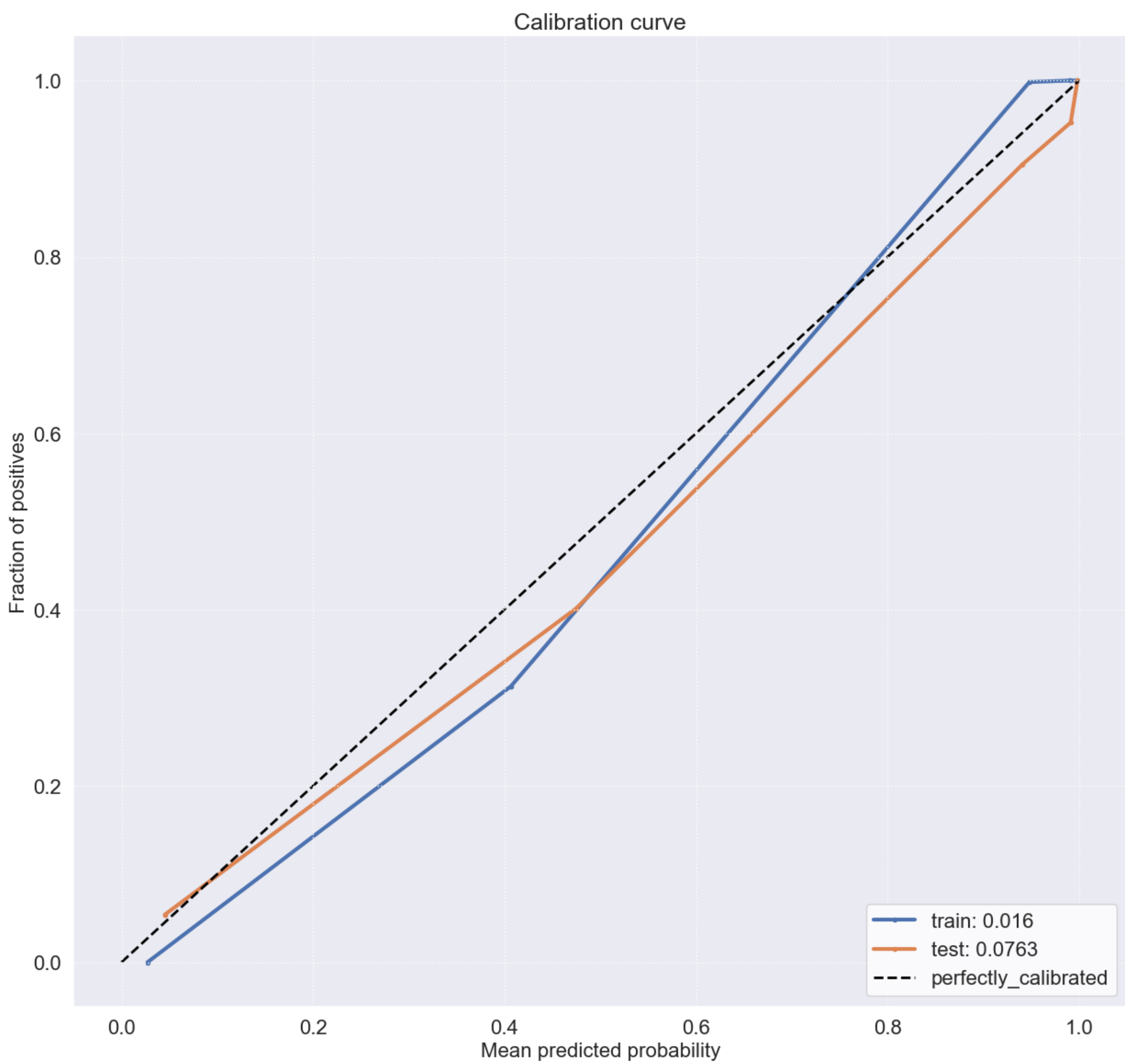
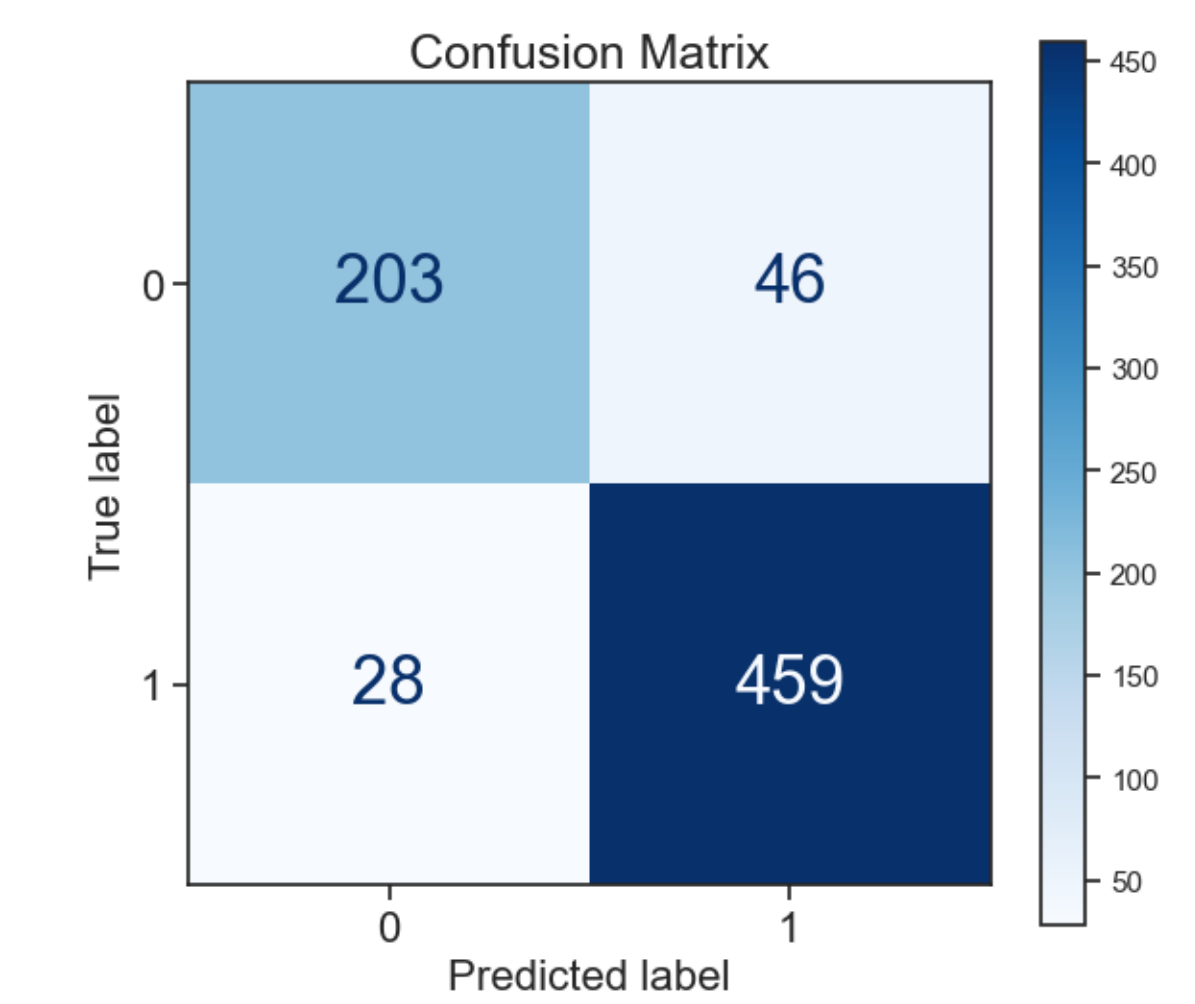


Metric	Train	Test
AUC	1.0	0.9523
accuracy	0.9949	0.8927
balanced accuracy	0.9925	0.863
recall_(sens)	1.0	0.9548
specificity	0.9849	0.7711
precision	0.9924	0.8908
f1_score	0.9949	0.8905

Protein: P21554 - metric: precision

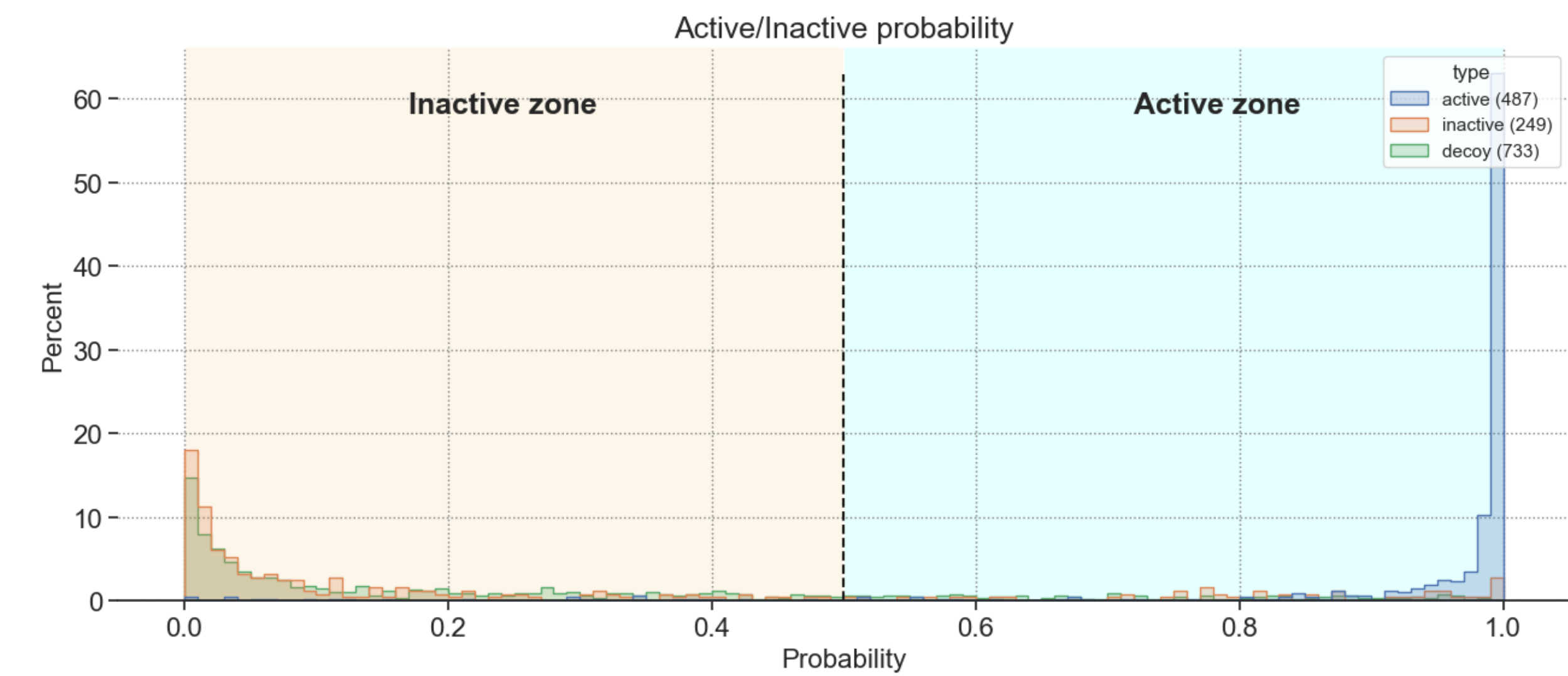
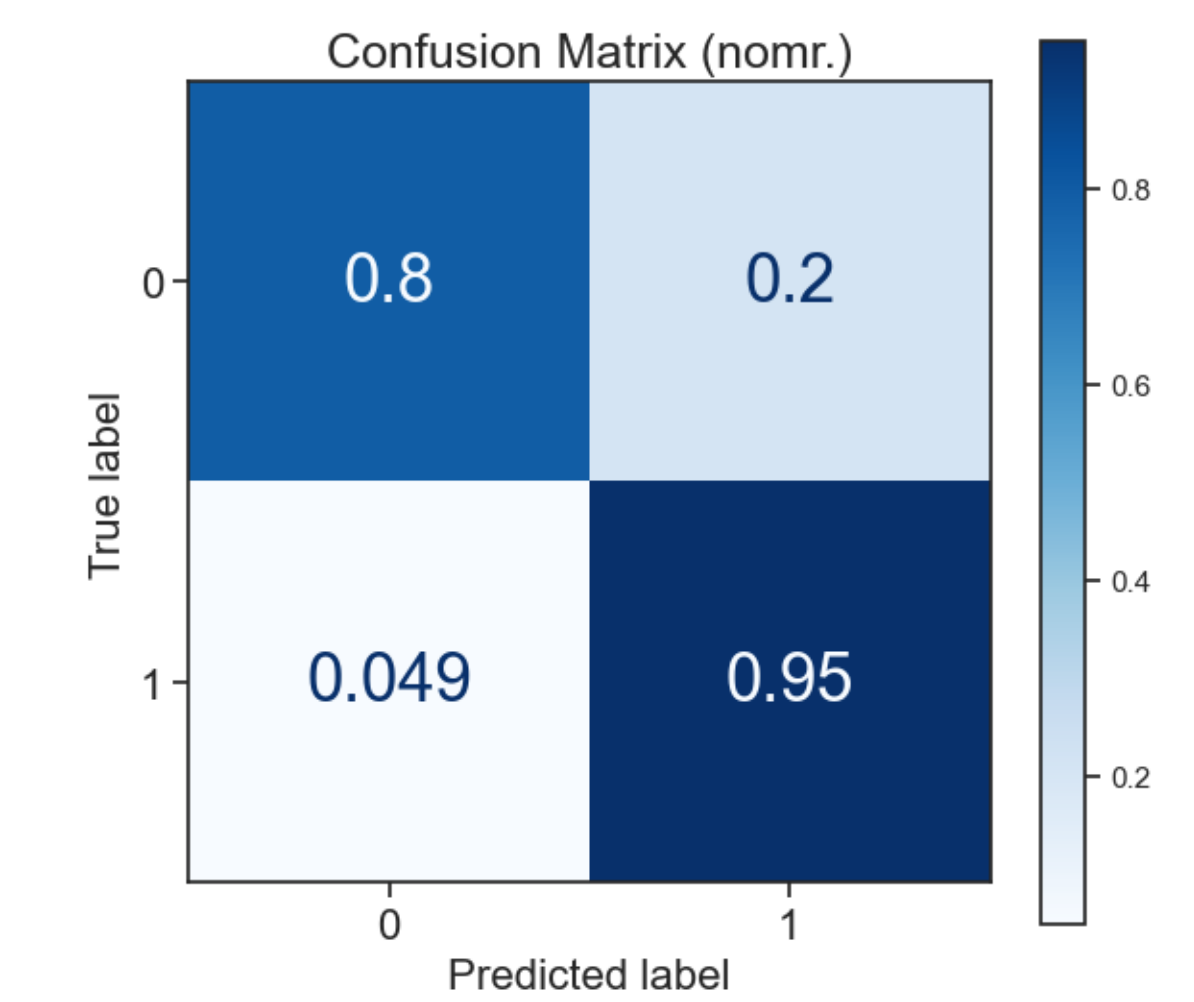
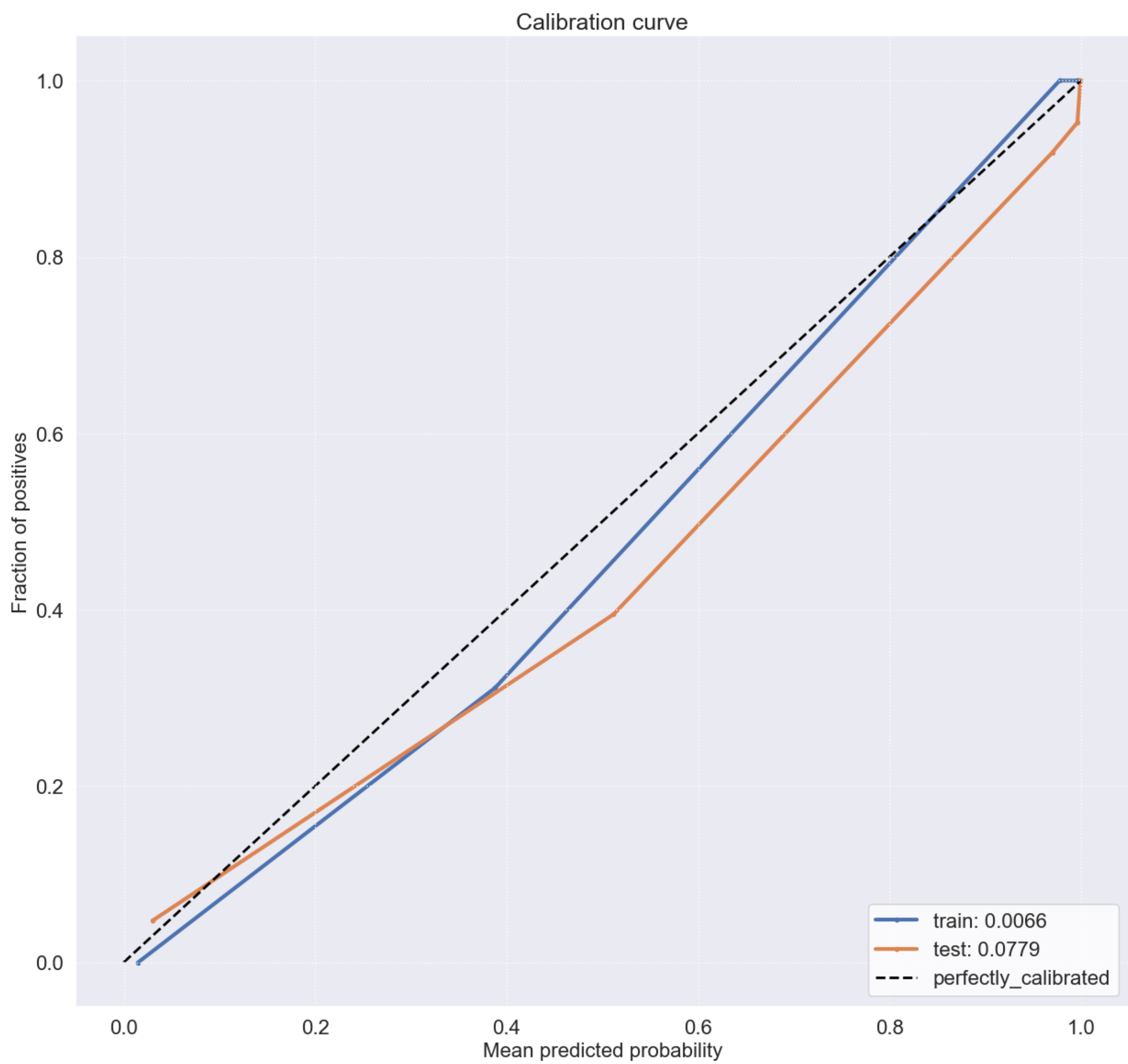
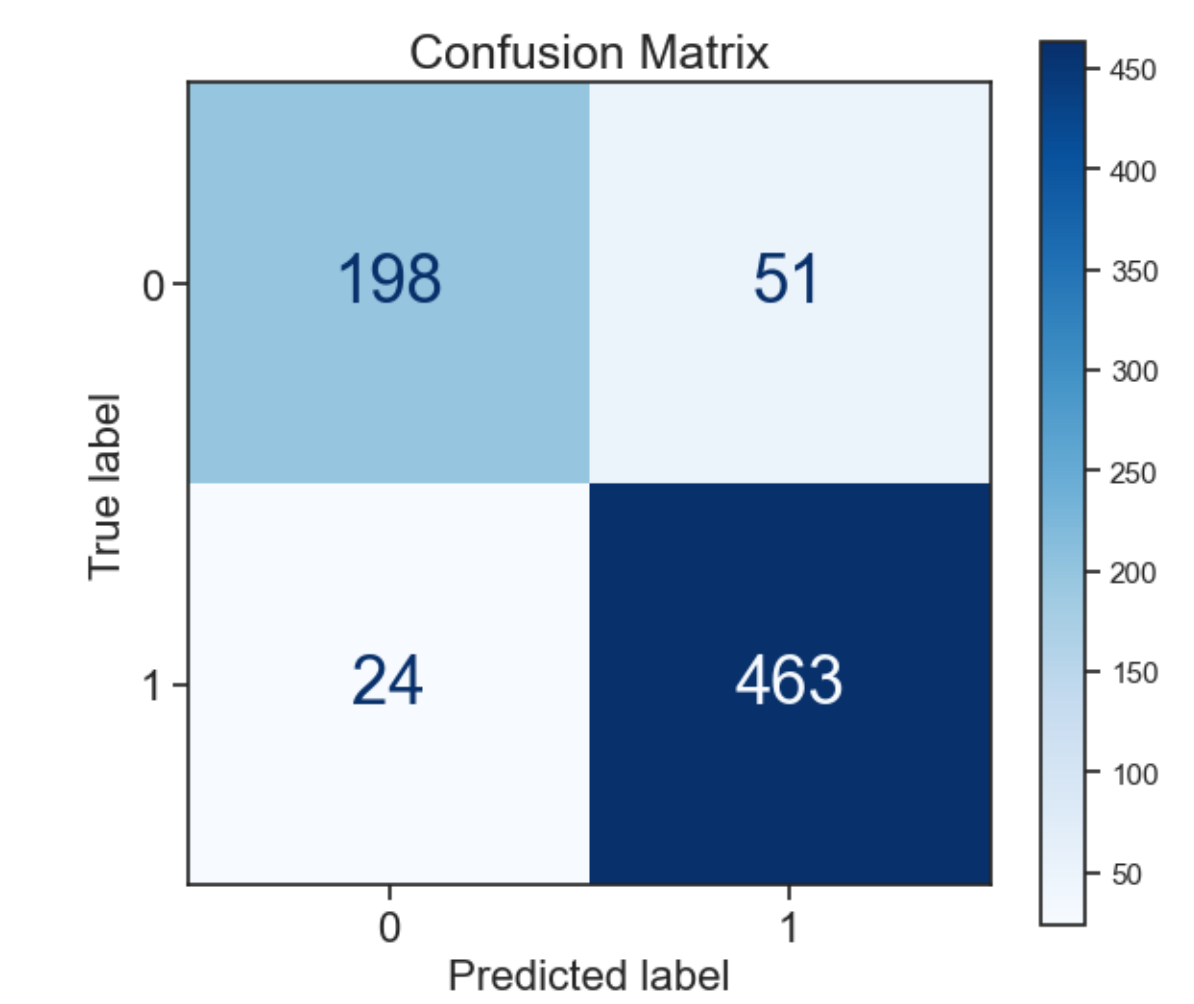
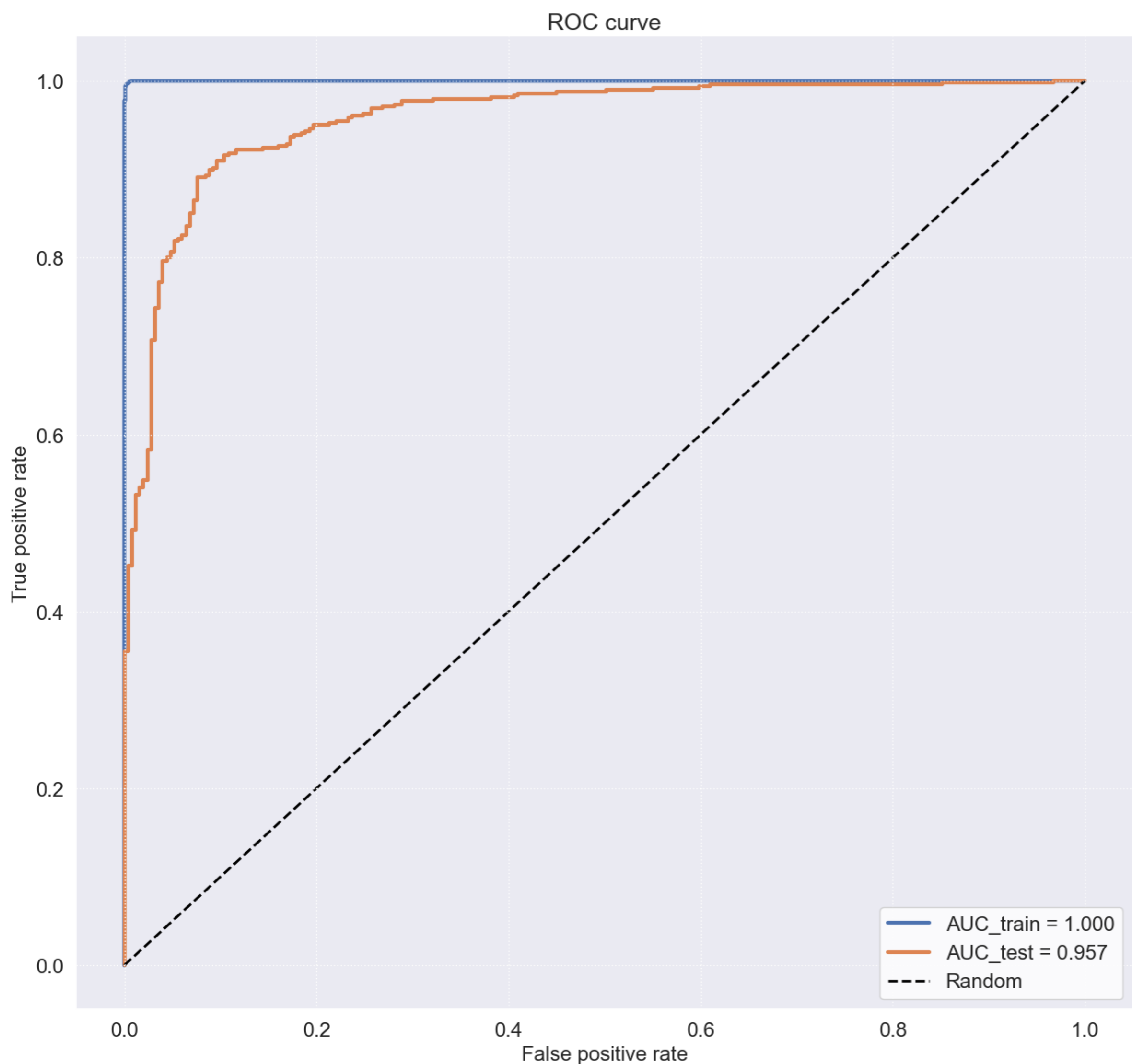
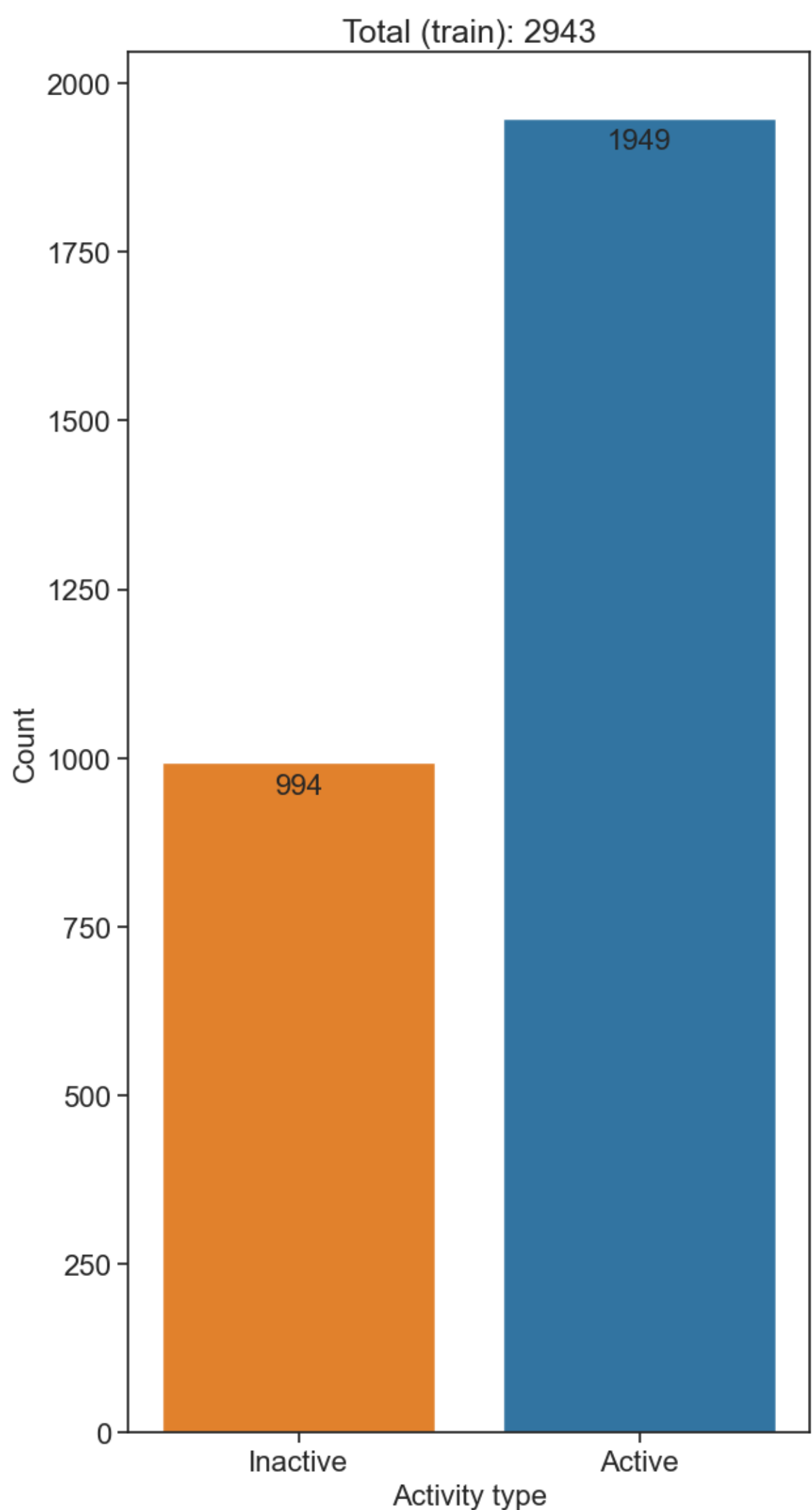


XGBoost Parameters	Value
alpha	1.0329
colsample_bytree	0.7872
gamma	0.1934
lambda	0.1739
learning_rate	0.0834
max_depth	9.0
min_child_weight	4.0
n_estimators	803.0
reg_alpha	0.8518
reg_lambda	0.1466
scale_pos_weight	1.4653
subsample	0.5877



Metric	Train	Test
AUC	0.9995	0.955
accuracy	0.9878	0.8995
balanced accuracy	0.9834	0.8789
recall_(sens)	0.9969	0.9425
specificity	0.9698	0.8153
precision	0.9848	0.9089
f1_score	0.9877	0.8985

Protein: P21554 - metric: SoftVotingXGBoostEnsemble



Metric	Train	Test
AUC	1.0	0.9575
accuracy	0.9966	0.8981
balanced accuracy	0.995	0.8729
recall_(sens)	1.0	0.9507
specificity	0.9899	0.7952
precision	0.9949	0.9008
f1_score	0.9966	0.8966