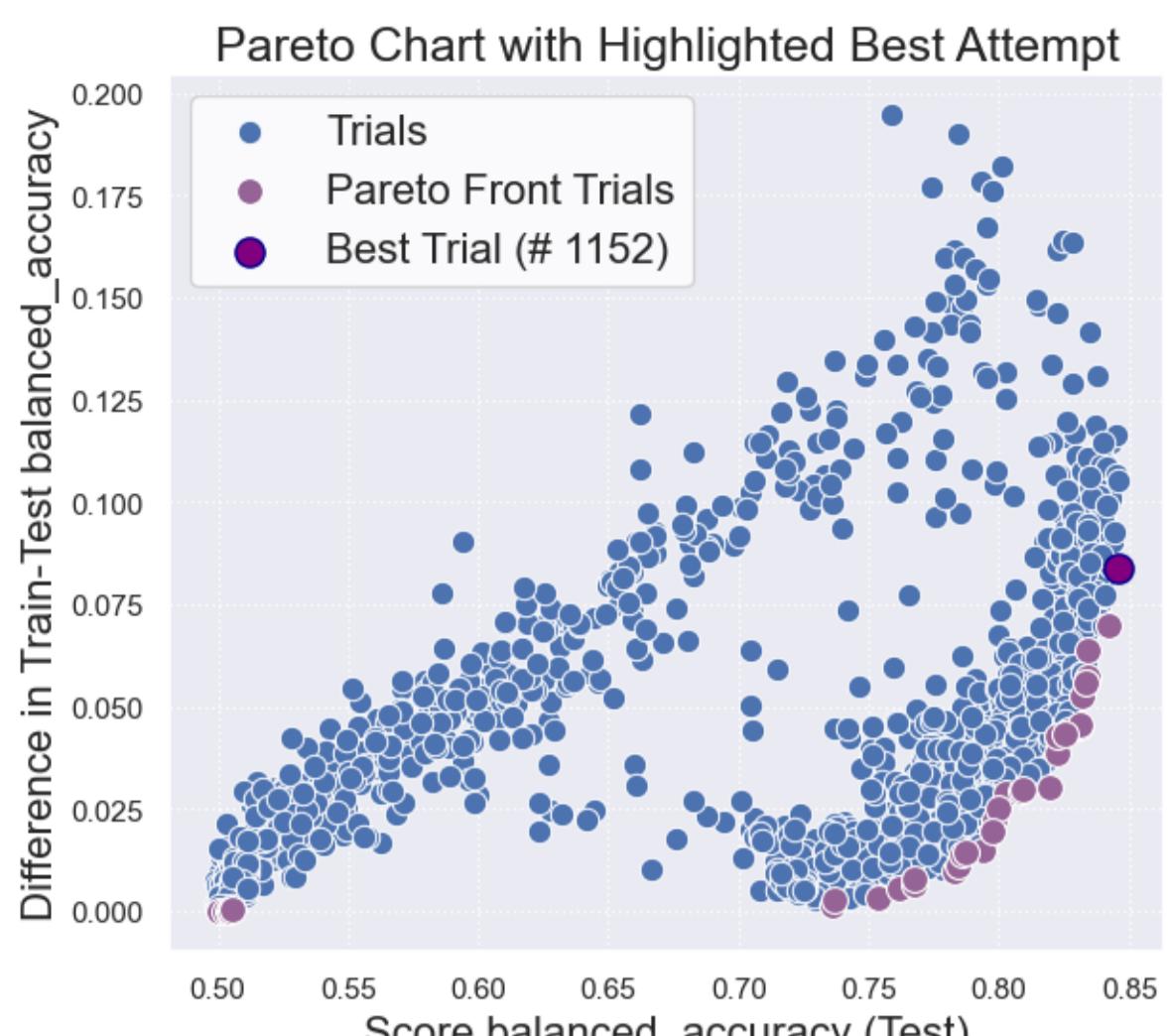
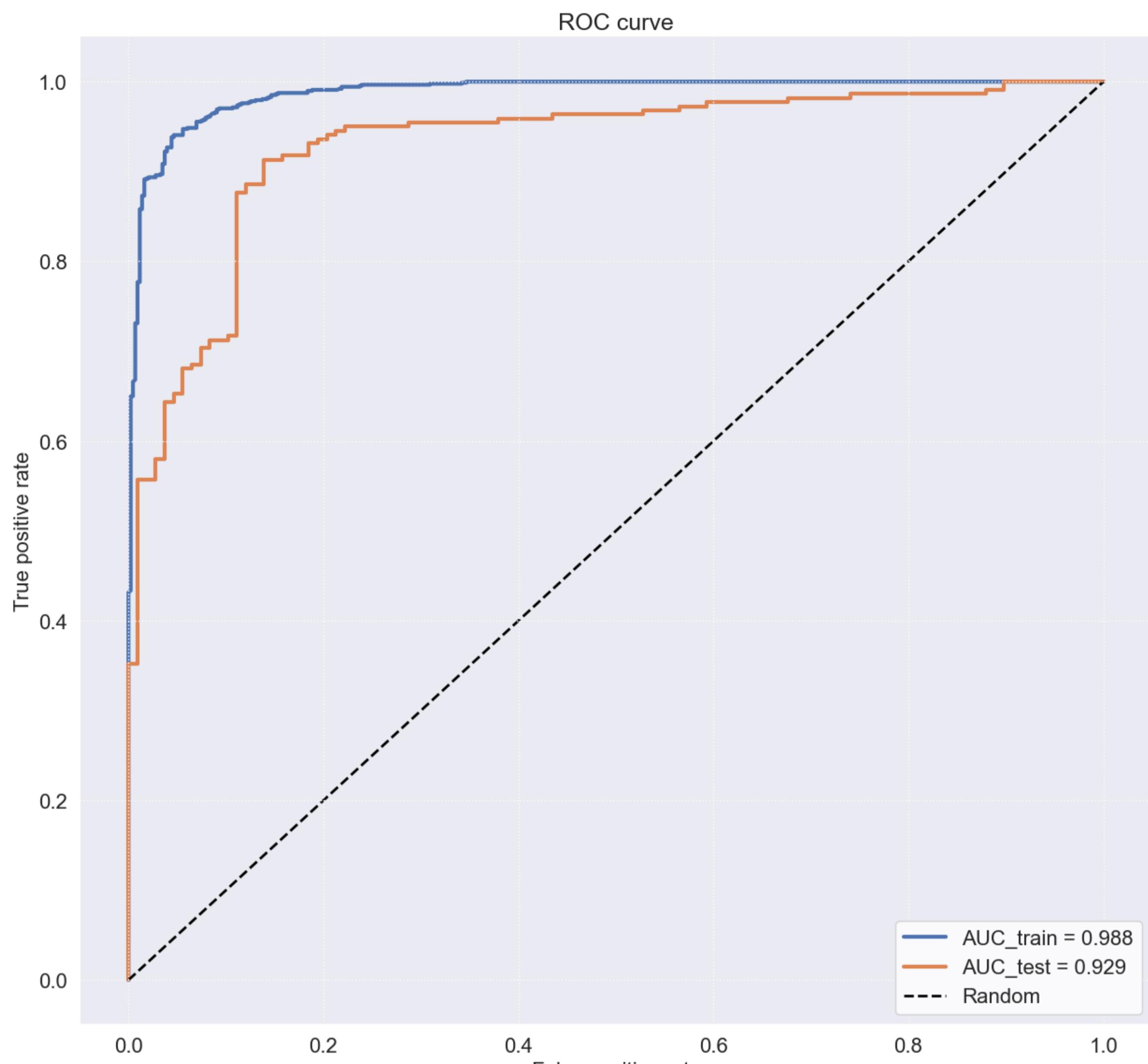
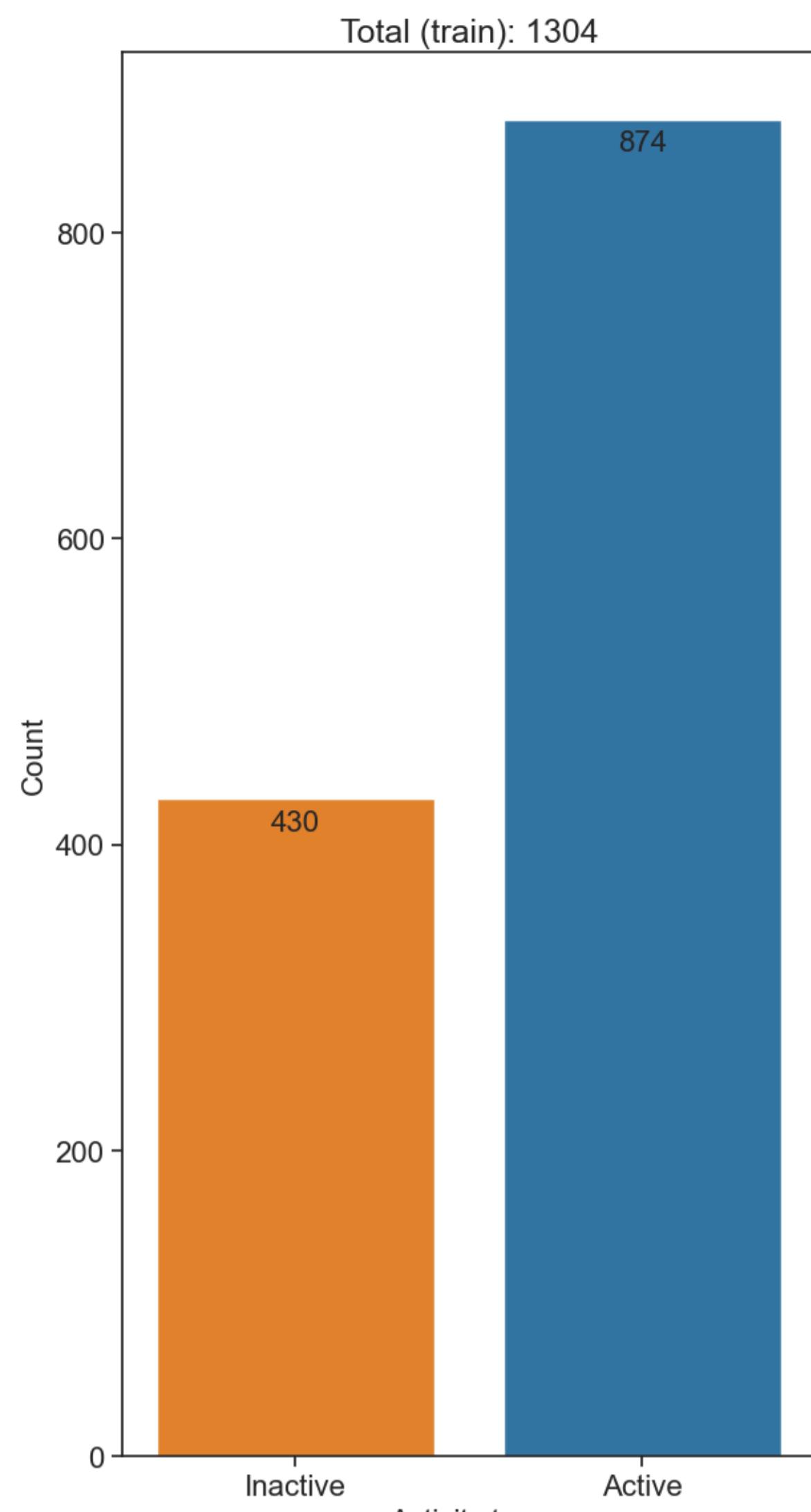
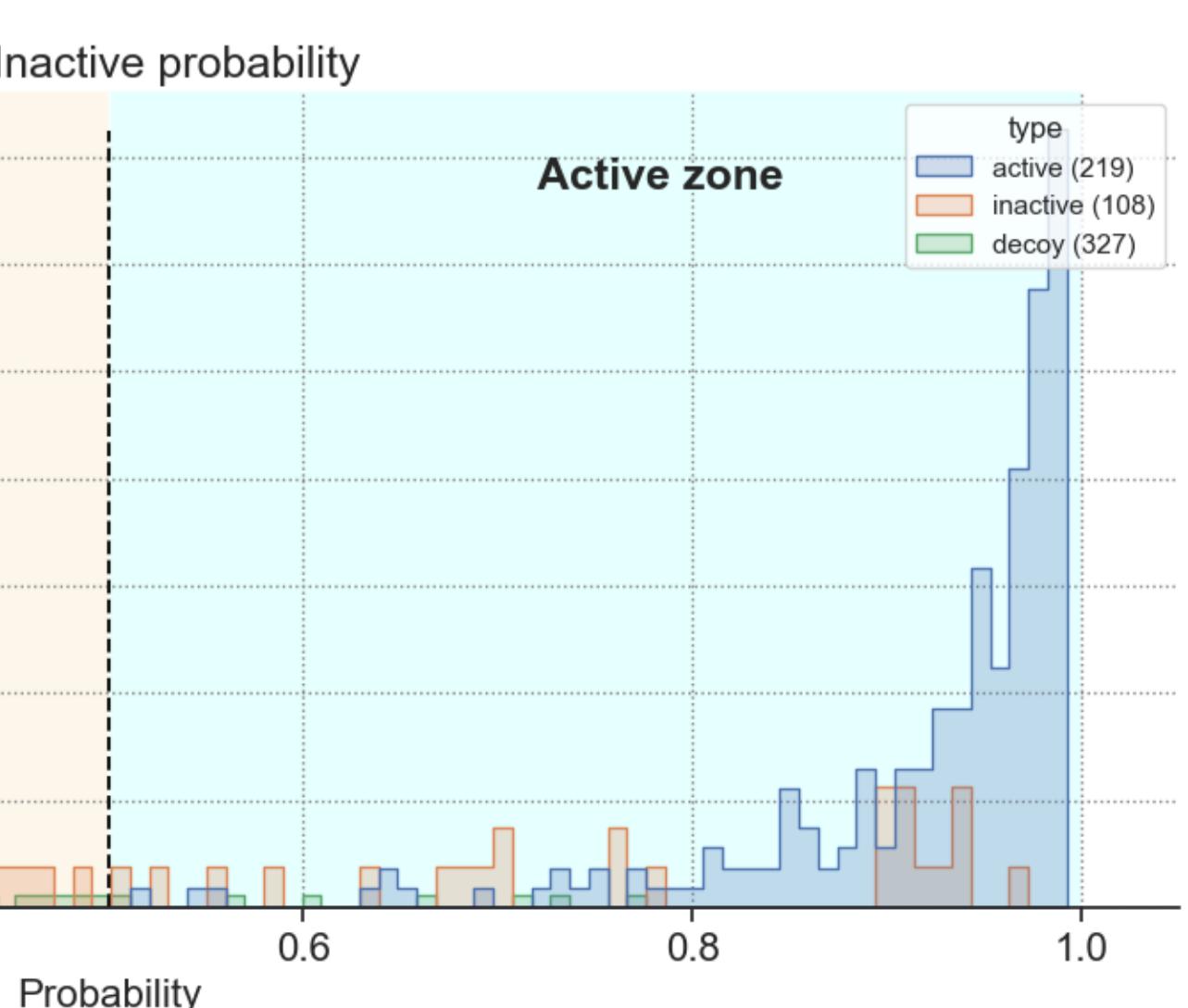
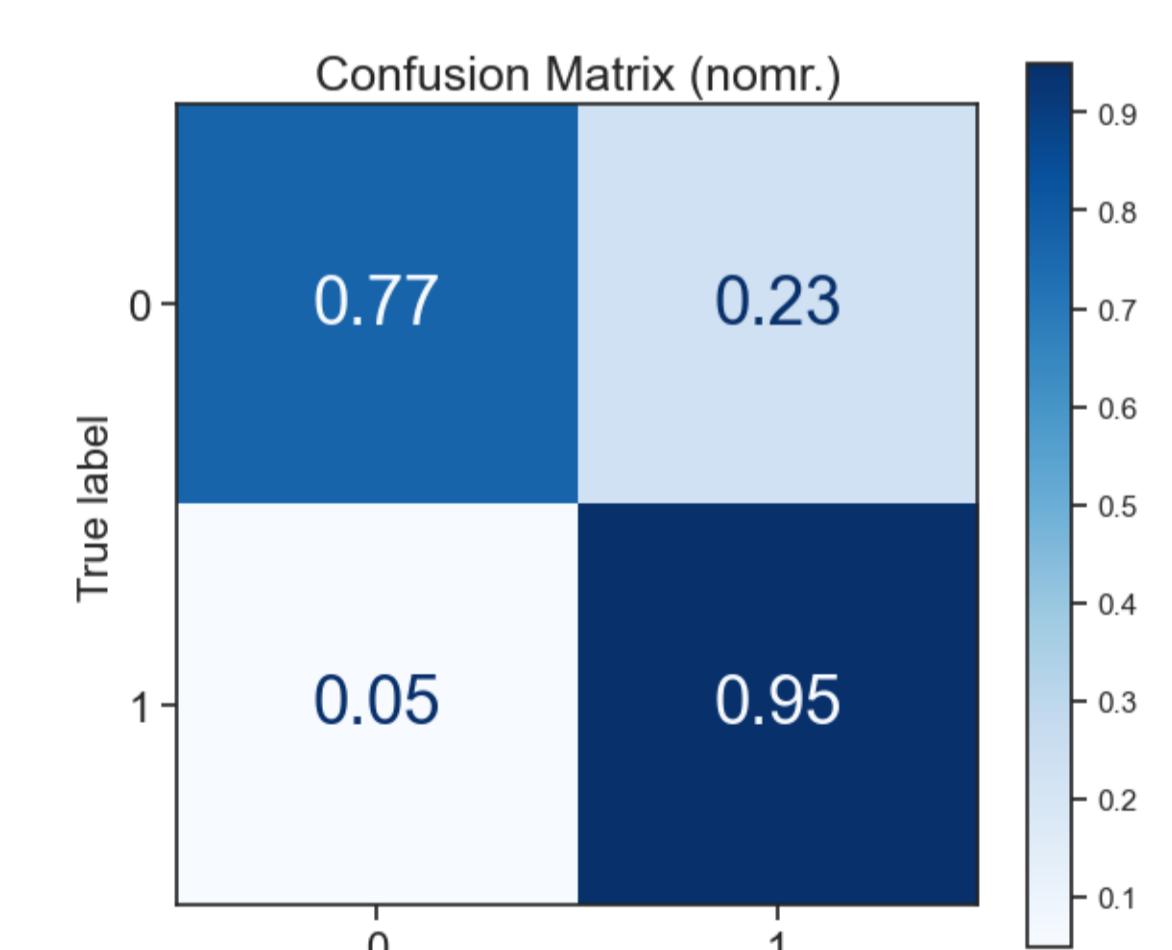
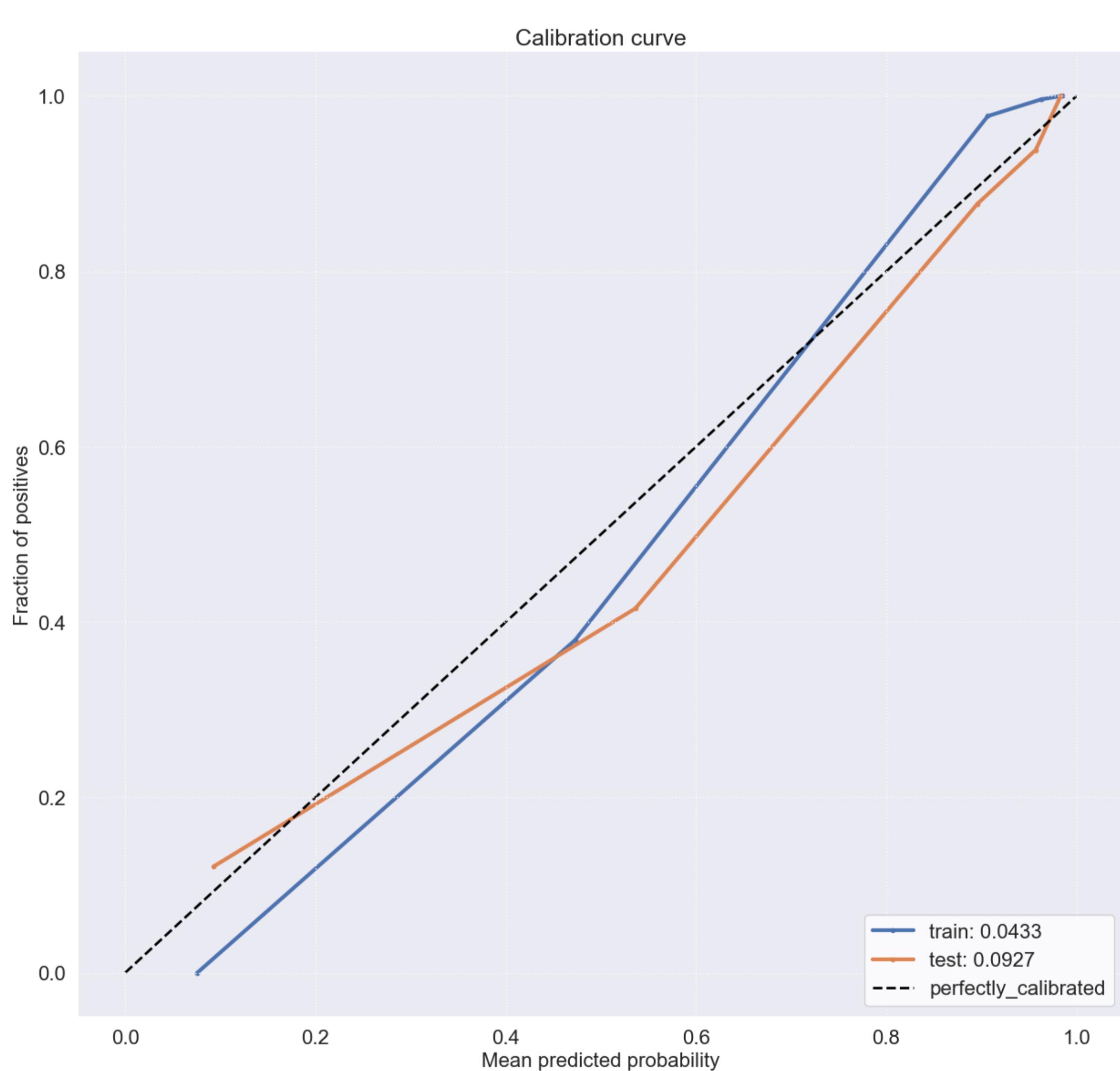
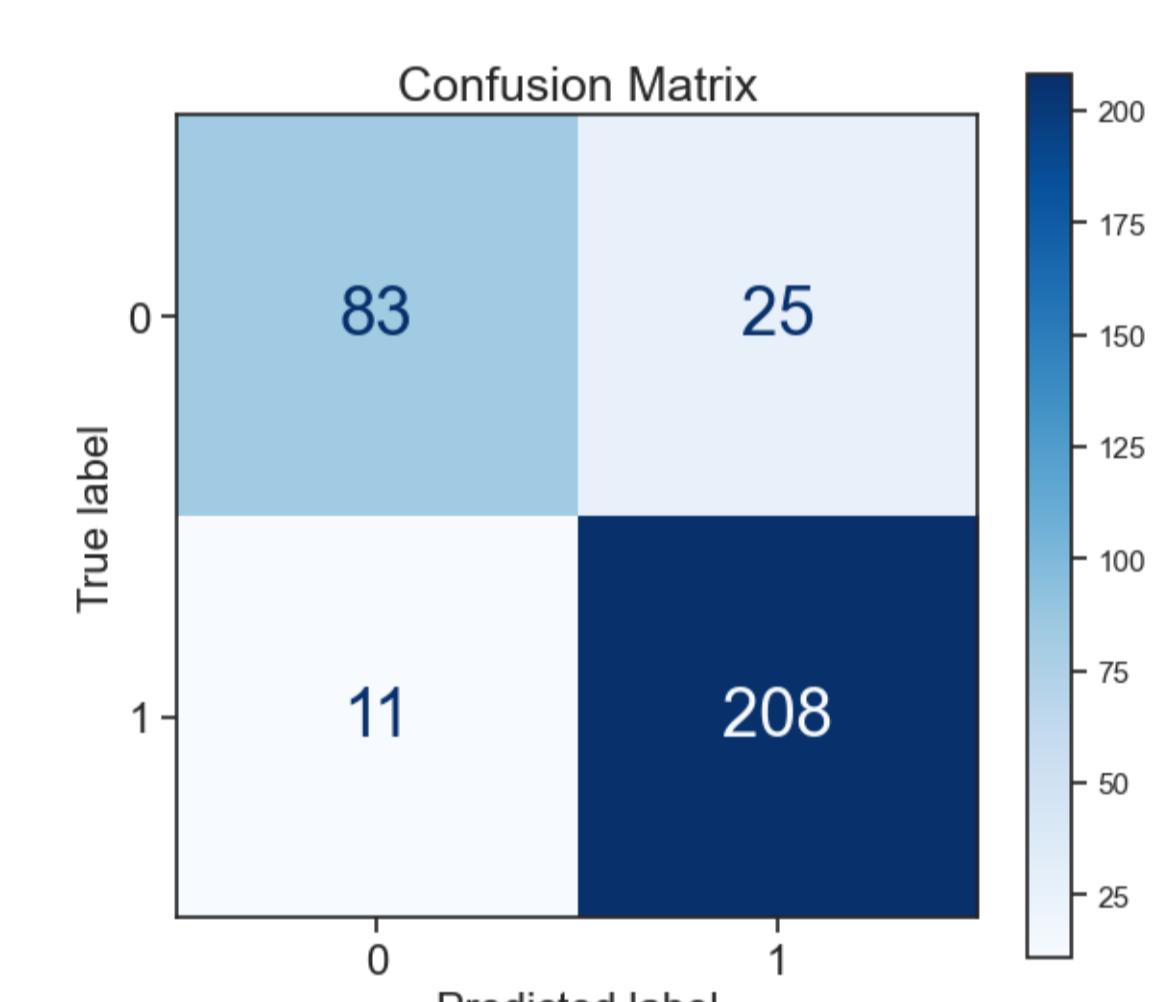


Protein: Q92731 - metric: balanced_accuracy

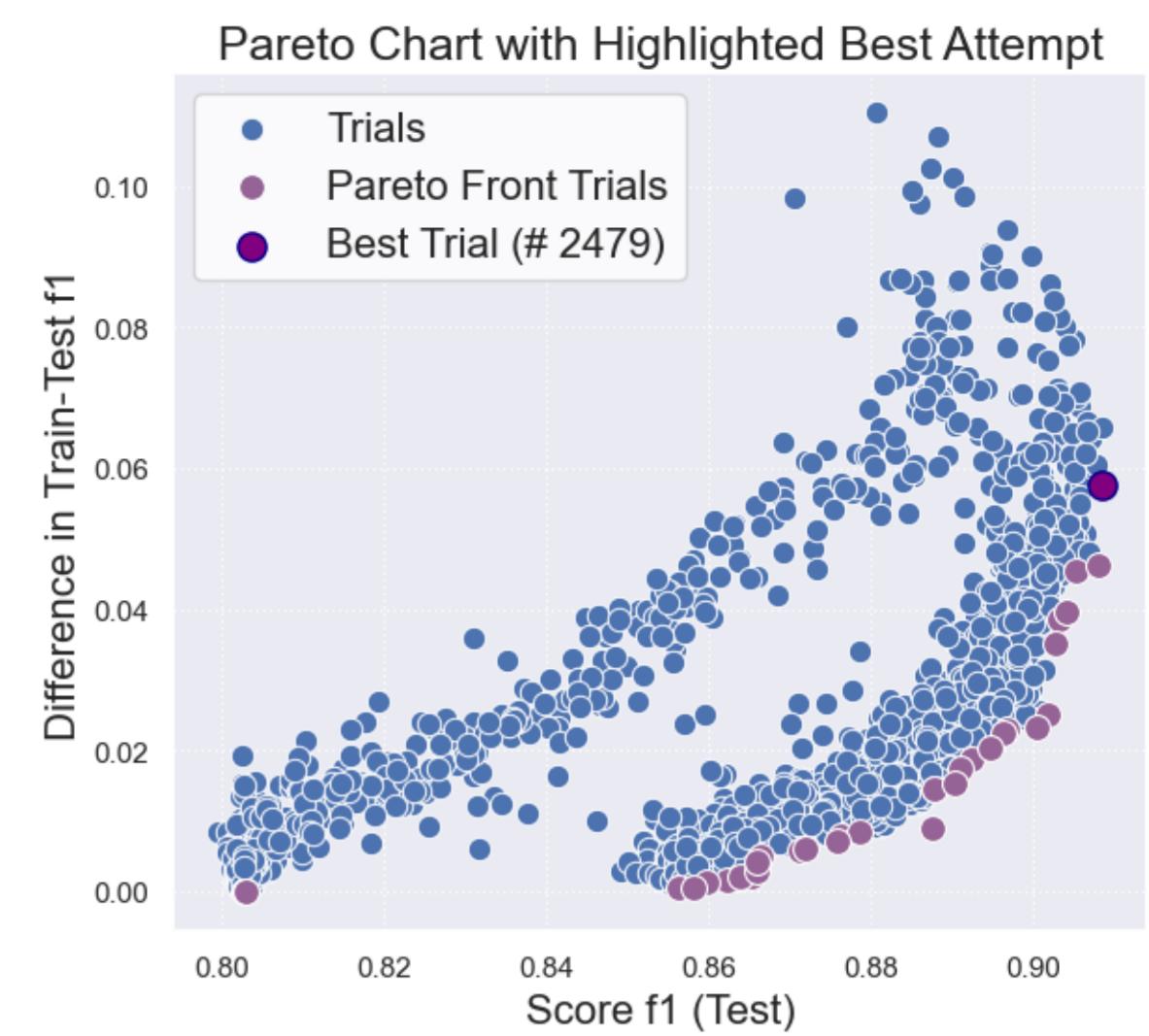
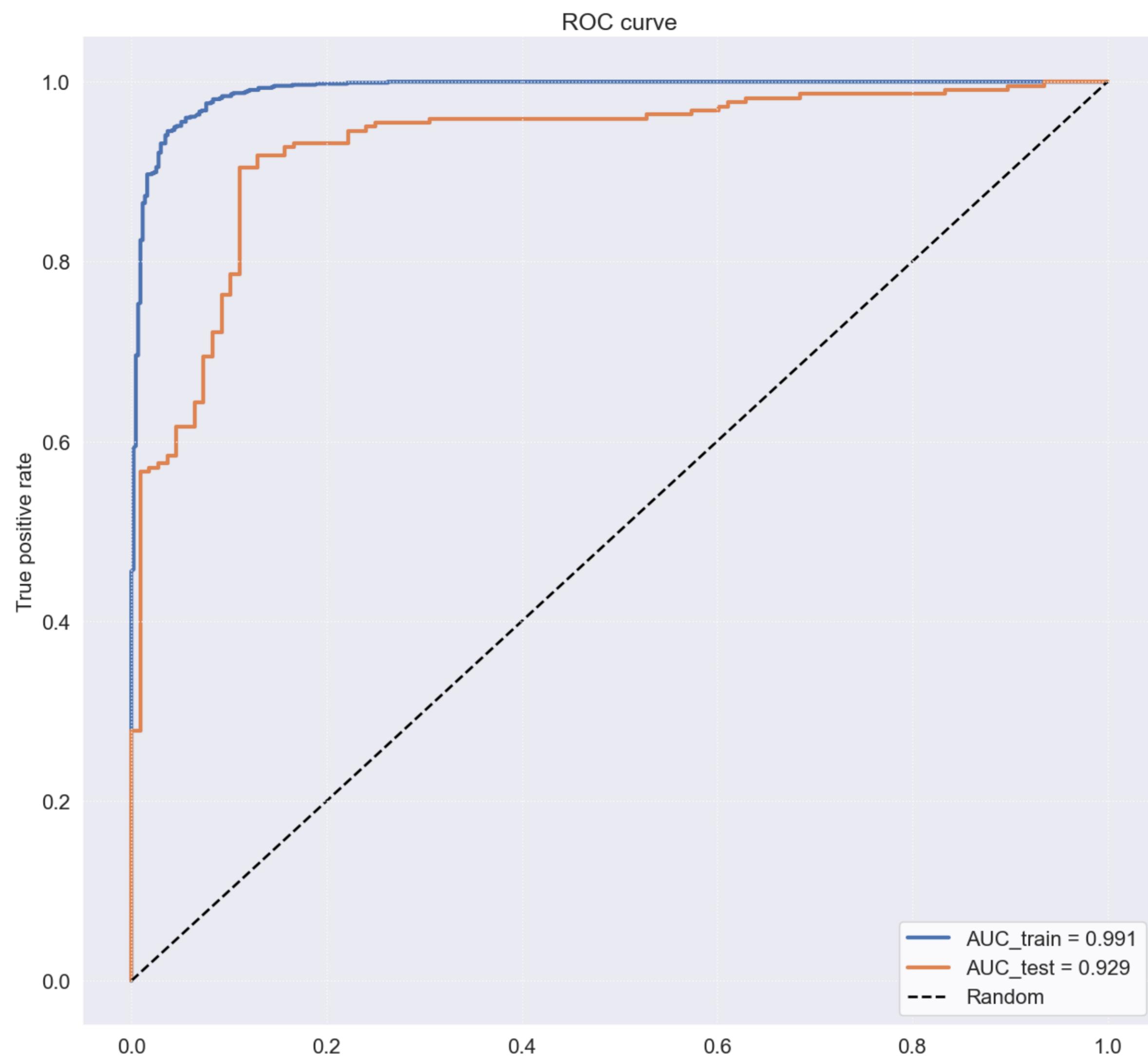
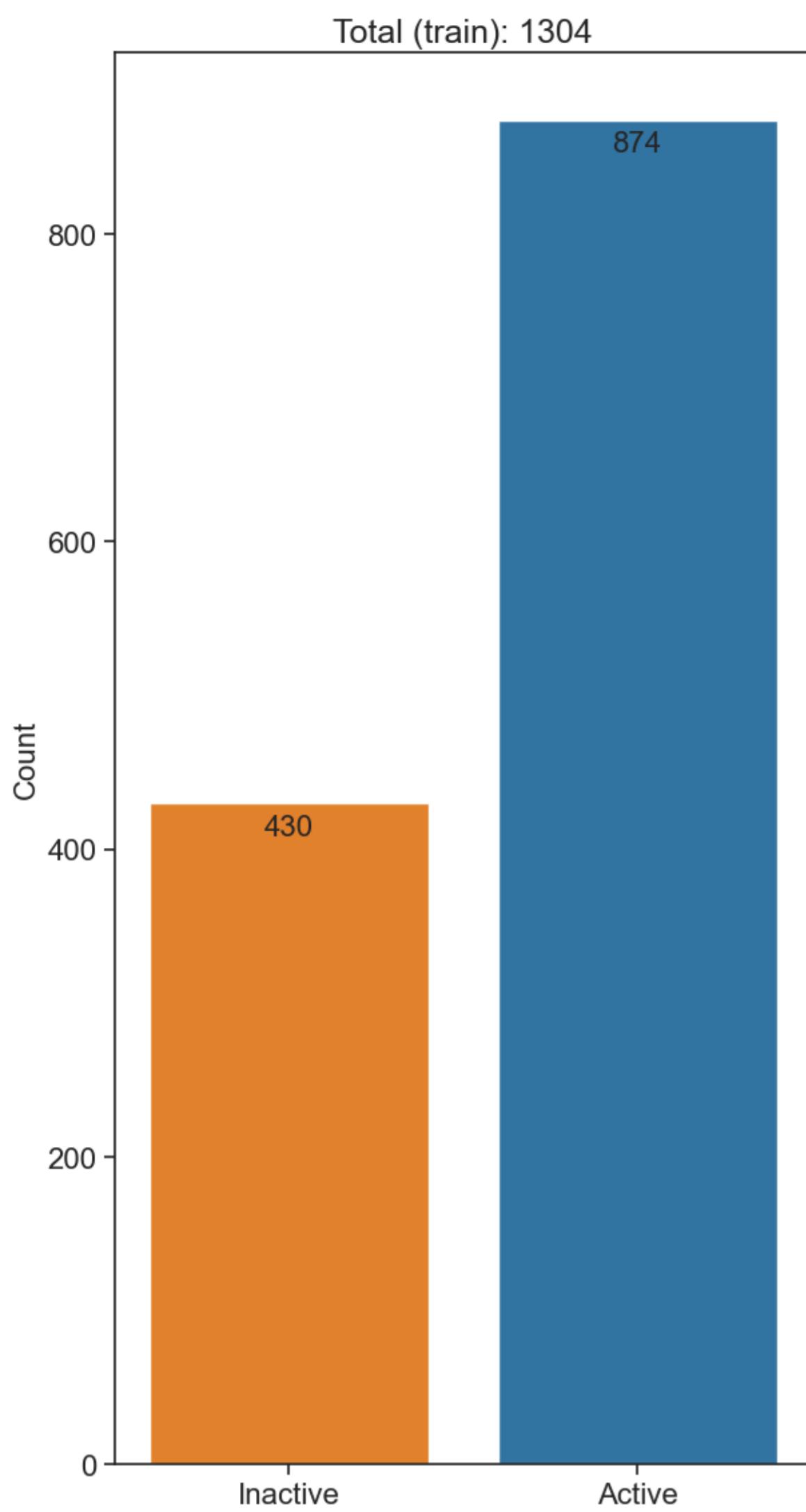


XGBoost Parameters	Value
alpha	2.4202
colsample_bytree	0.6394
gamma	0.7216
lambda	3.0648
learning_rate	0.0142
max_depth	10.0
min_child_weight	2.0
n_estimators	817.0
reg_alpha	0.0075
reg_lambda	0.8494
scale_pos_weight	1.1961
subsample	0.5872

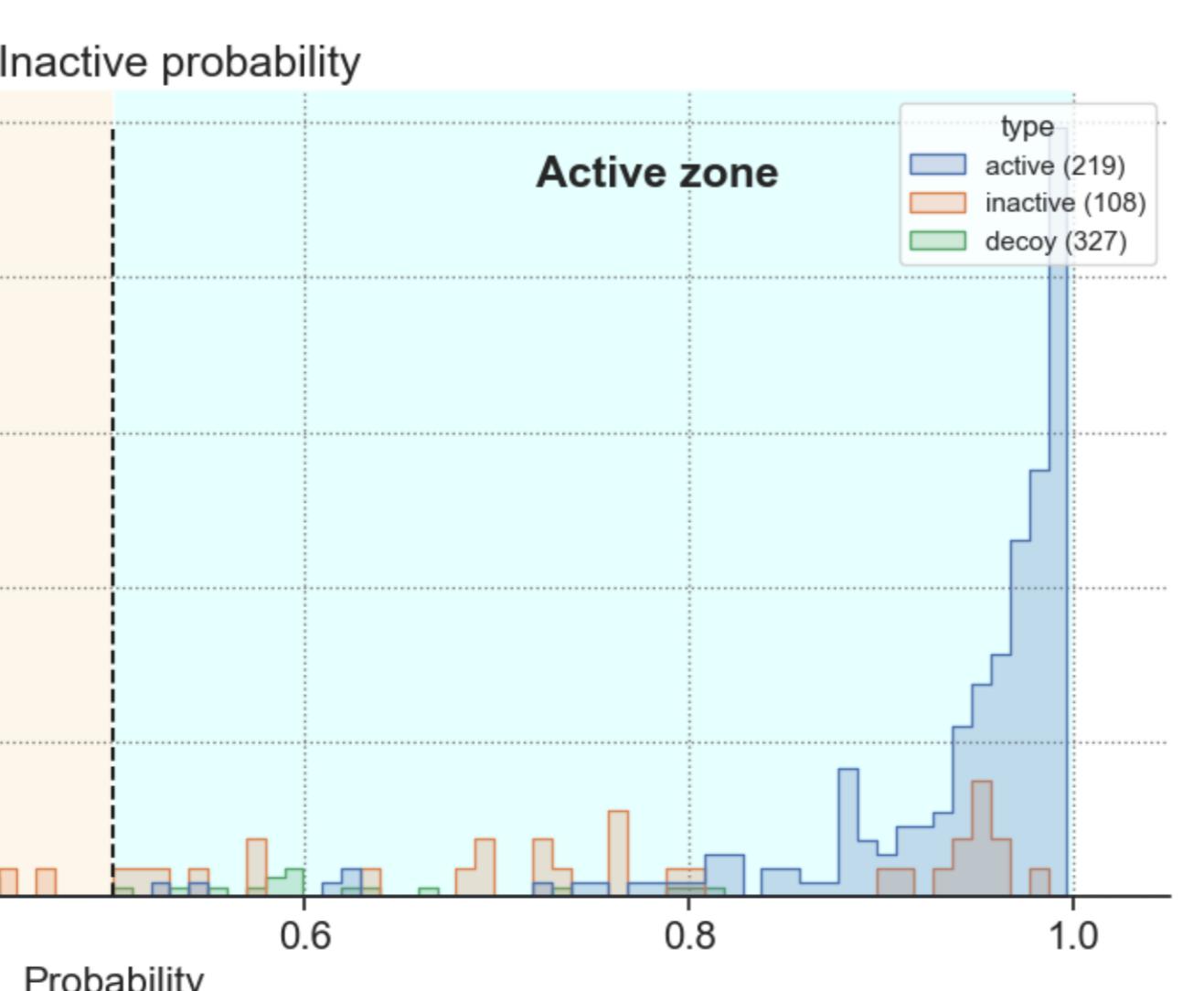
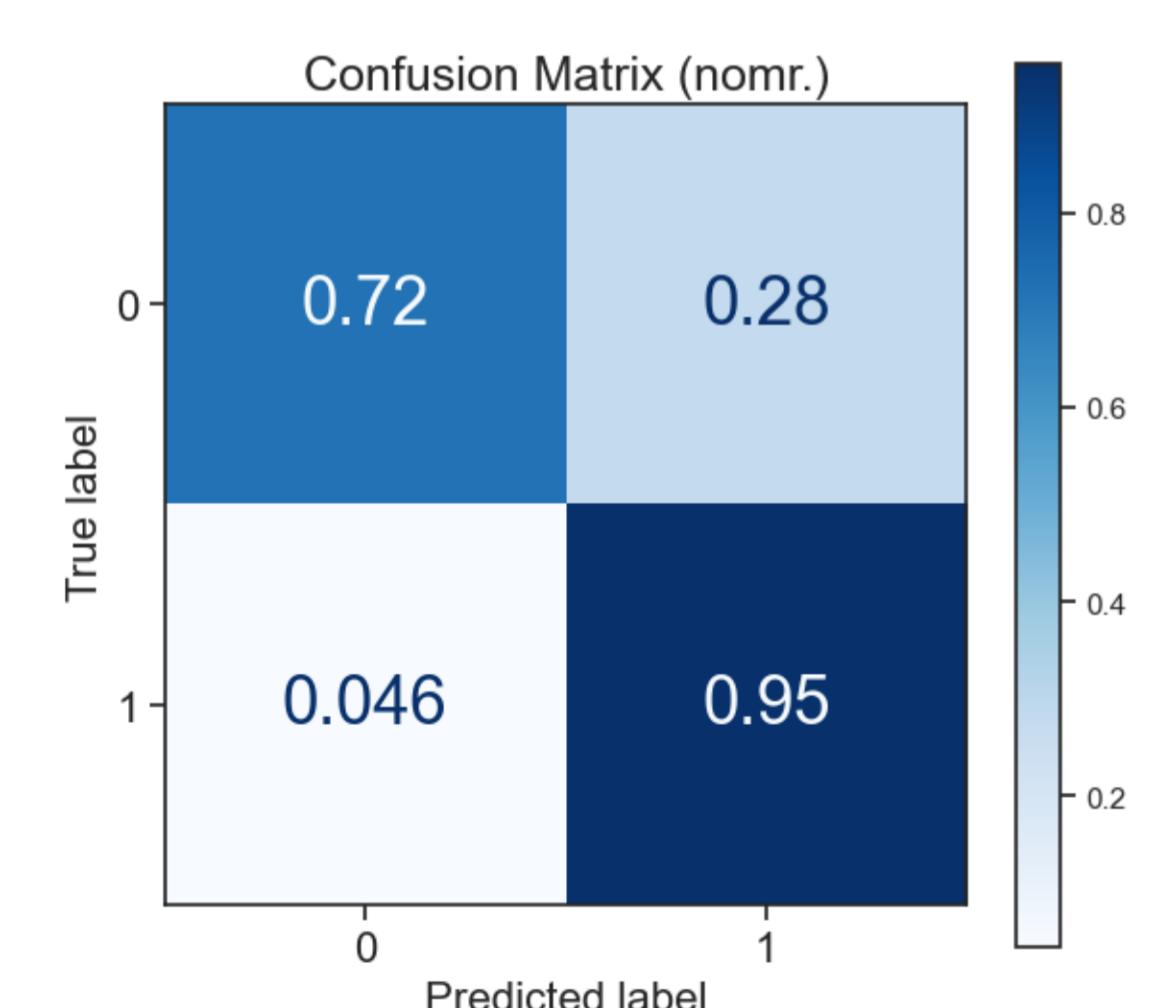
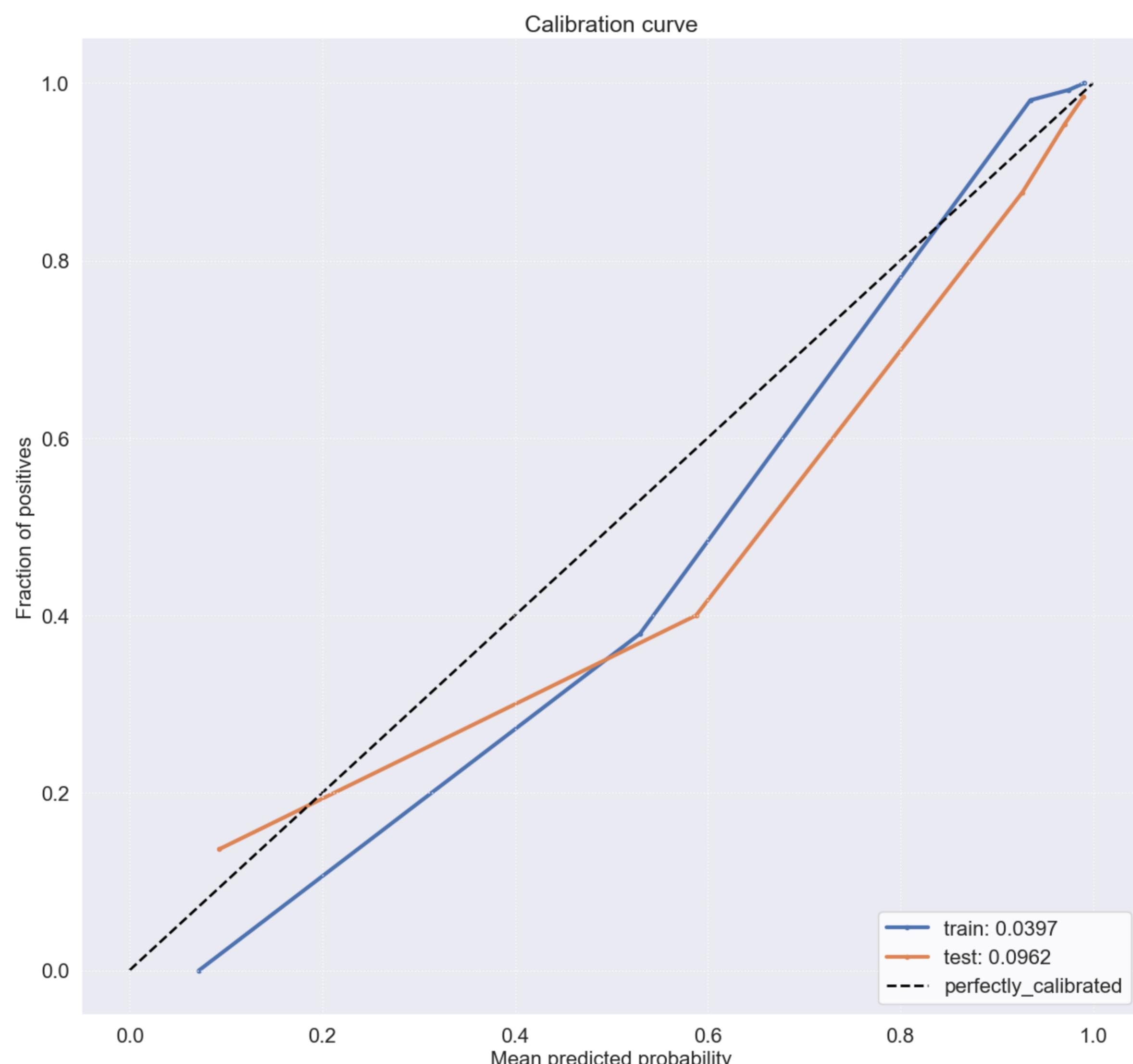
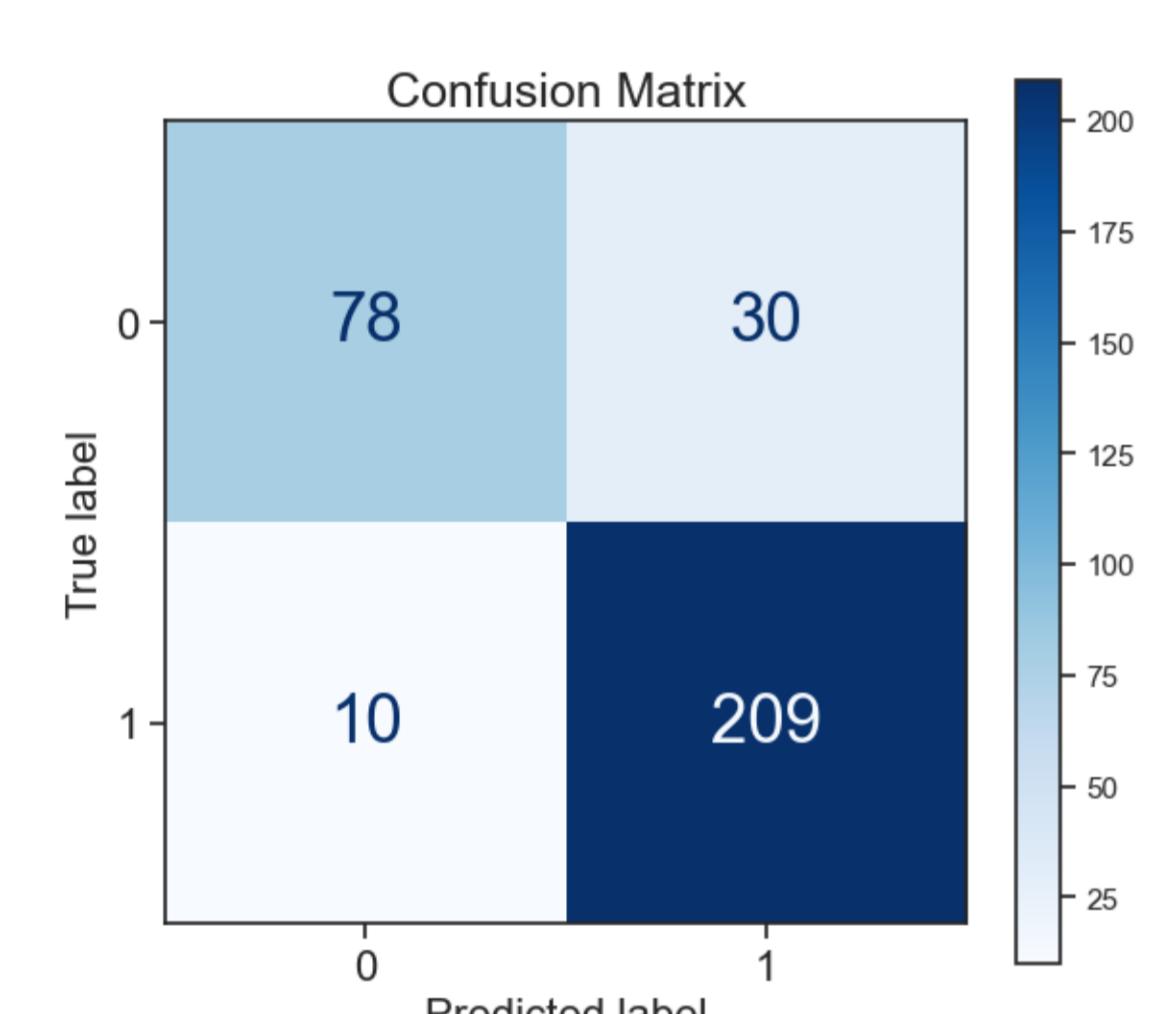


Metric	Train	Test
AUC	0.9877	0.9291
accuracy	0.9456	0.8899
balanced accuracy	0.931	0.8591
recall_(sens)	0.9737	0.9498
specificity	0.8884	0.7685
precision	0.9466	0.8927
f1_score	0.9451	0.8878

Protein: Q92731 - metric: f1

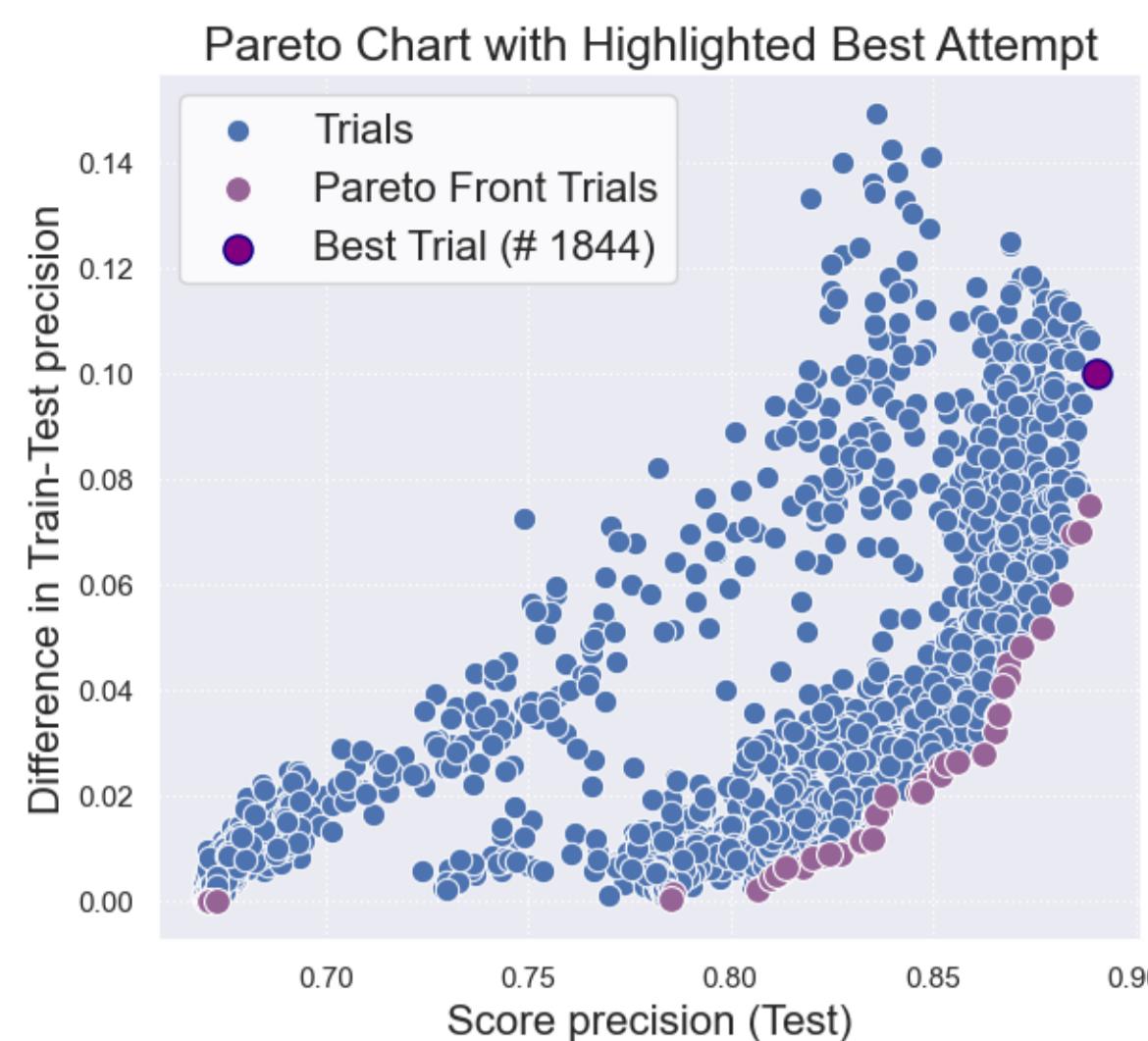
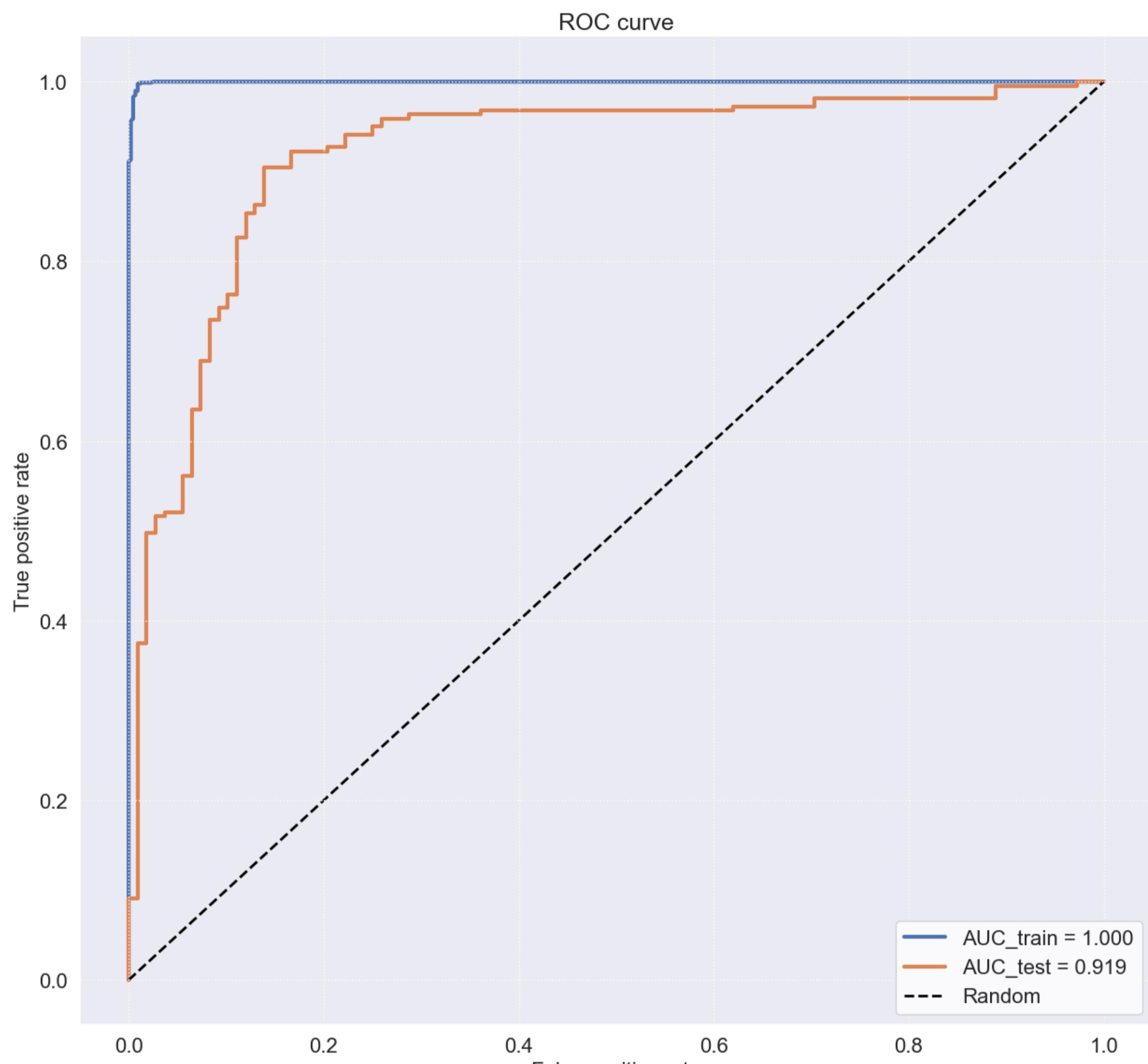
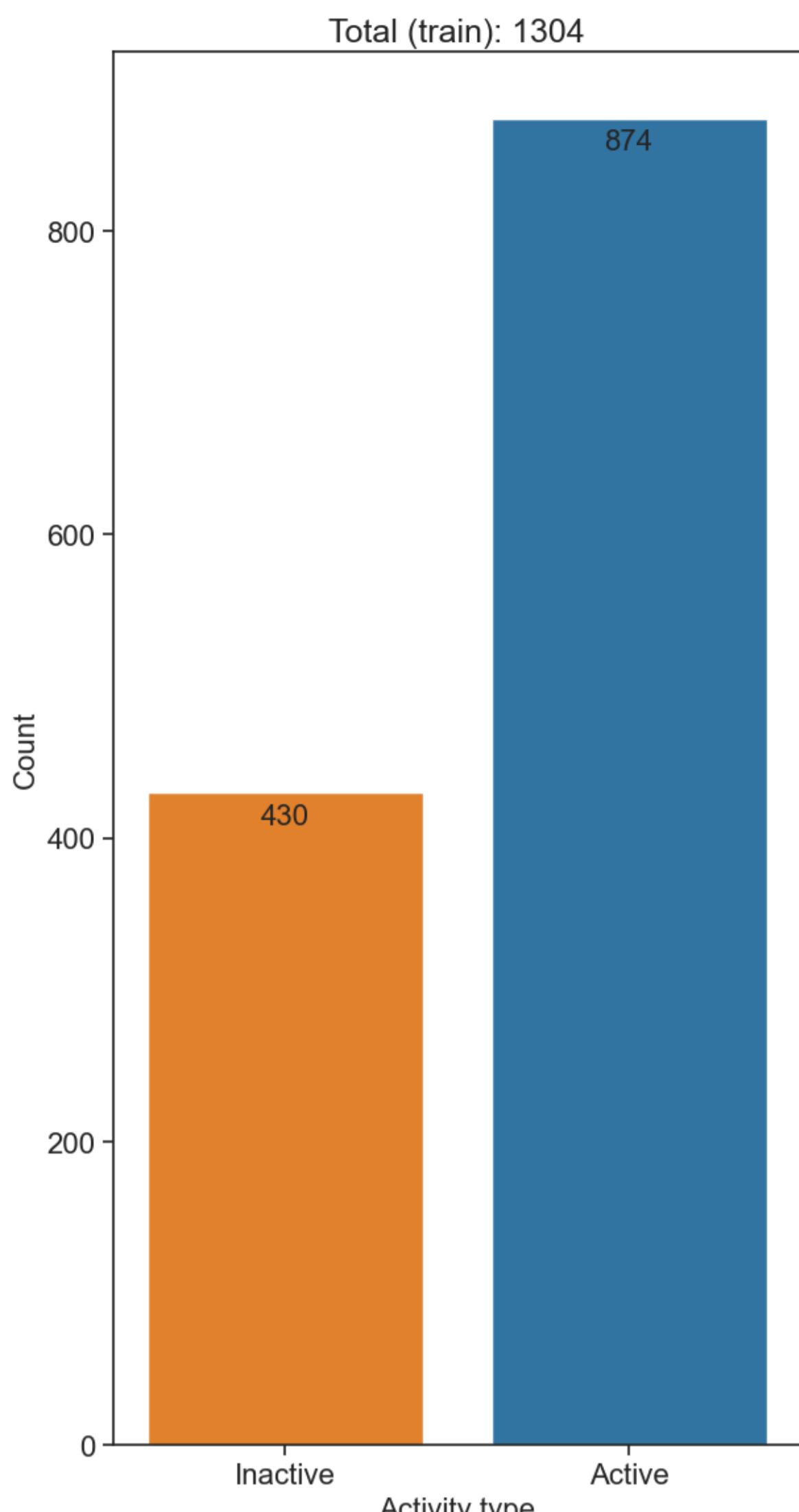


XGBoost Parameters	Value
alpha	1.5451
colsample_bytree	0.5655
gamma	0.3625
lambda	0.2511
learning_rate	0.0304
max_depth	8.0
min_child_weight	2.0
n_estimators	658.0
reg_alpha	0.7399
reg_lambda	0.3869
scale_pos_weight	1.7848
subsample	0.5312

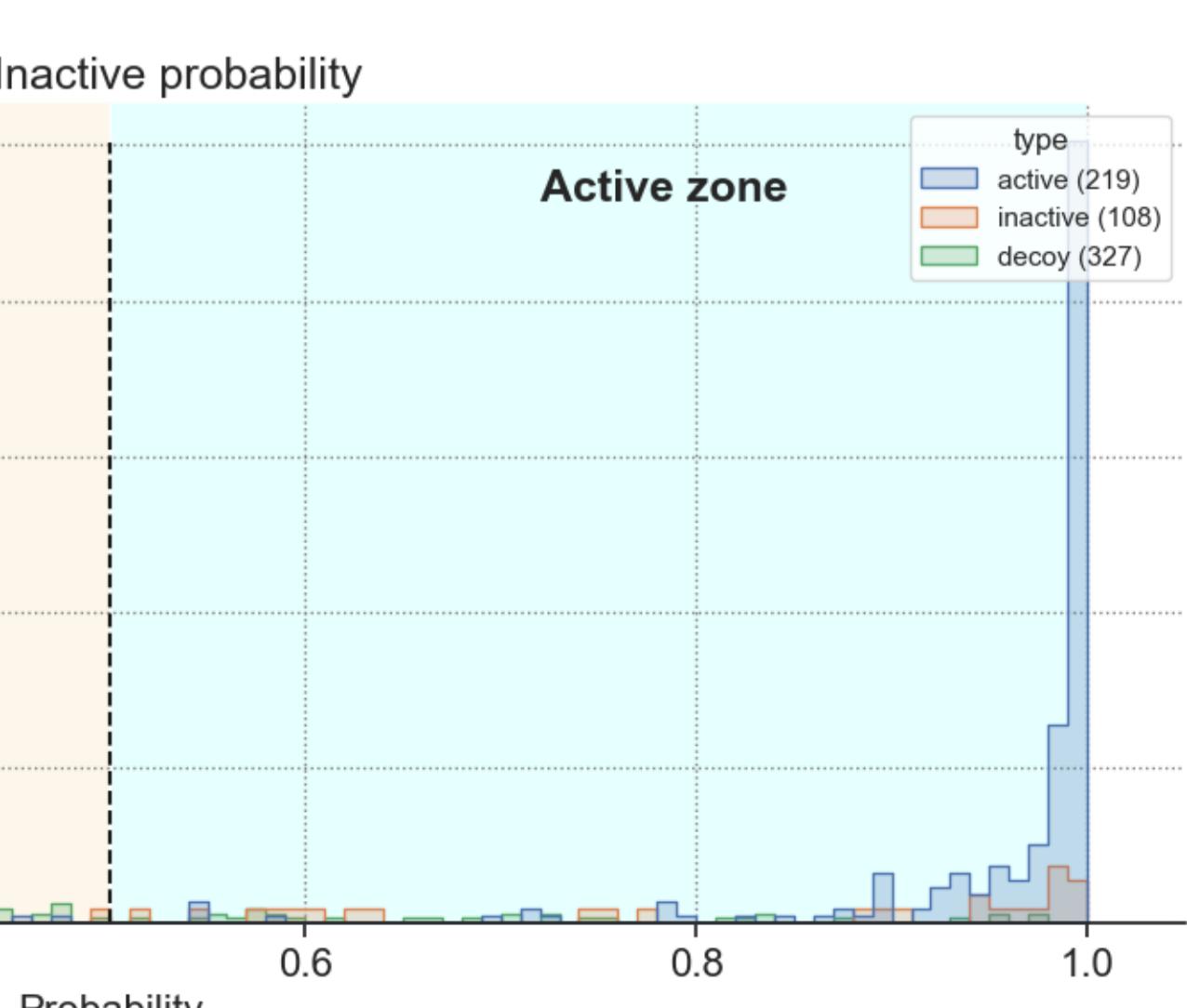
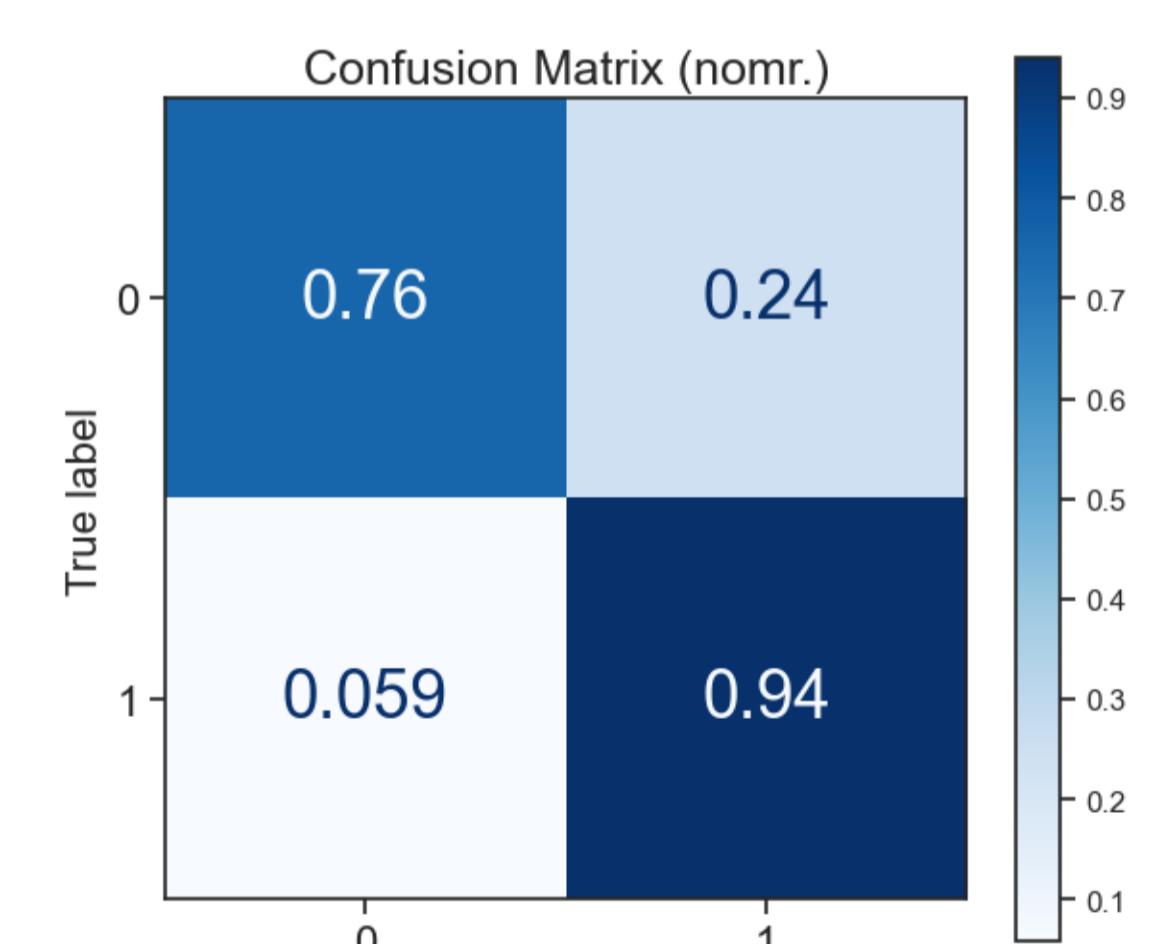
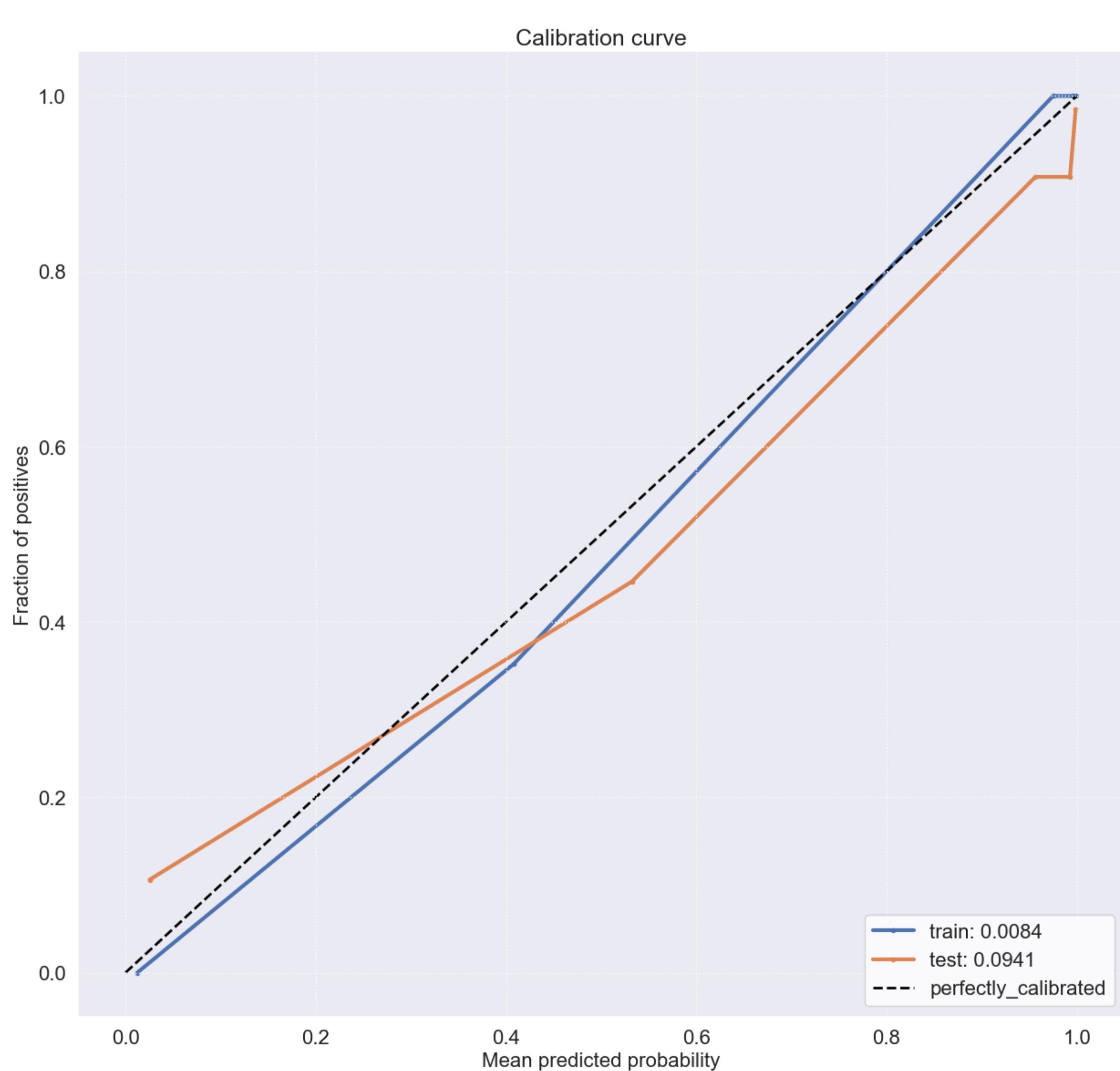
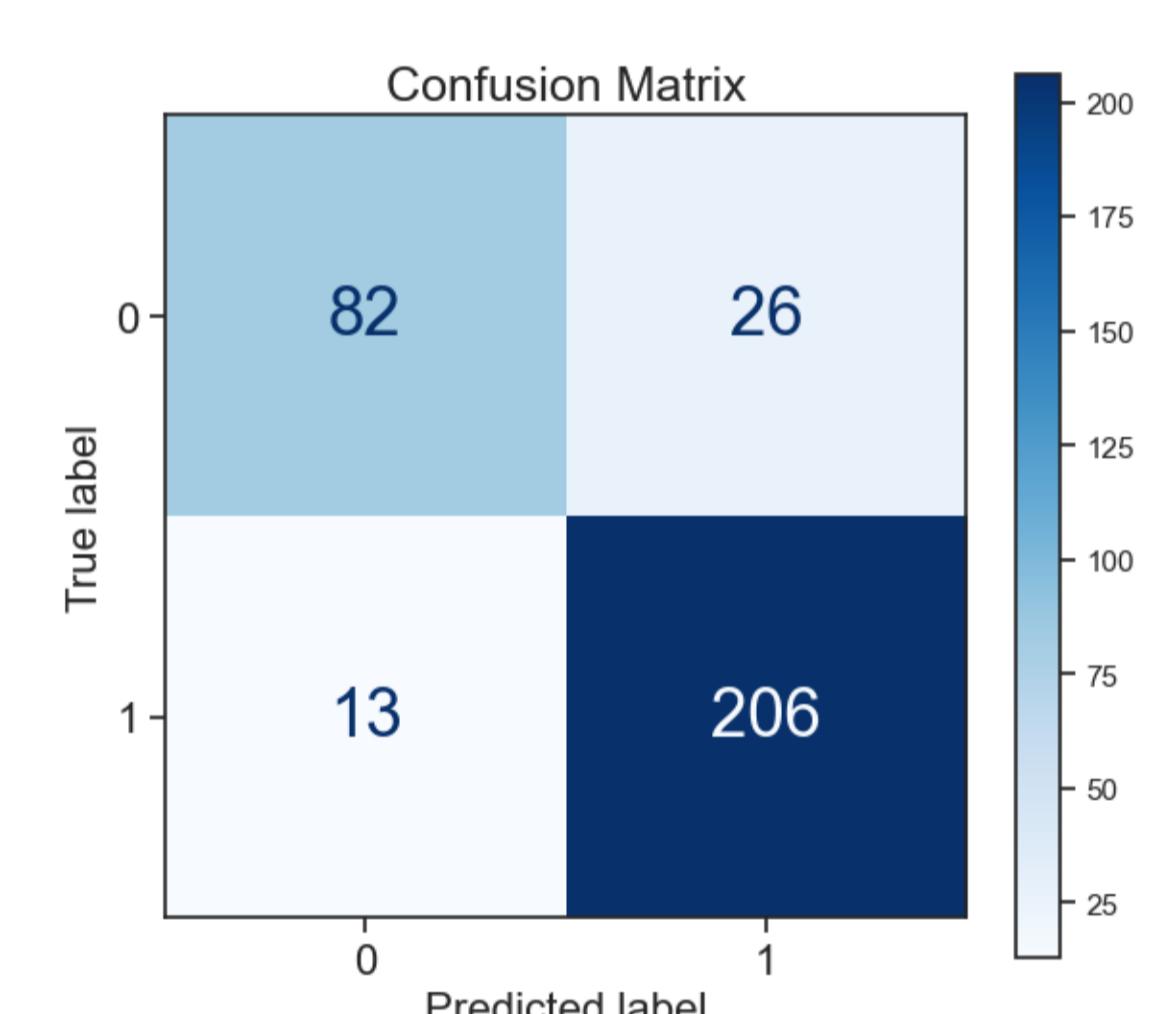


Metric	Train	Test
AUC	0.9908	0.9288
accuracy	0.9517	0.8777
balanced accuracy	0.9309	0.8383
recall_(sens)	0.992	0.9543
specificity	0.8698	0.7222
precision	0.9393	0.8745
f1_score	0.9509	0.8741

Protein: Q92731 - metric: precision

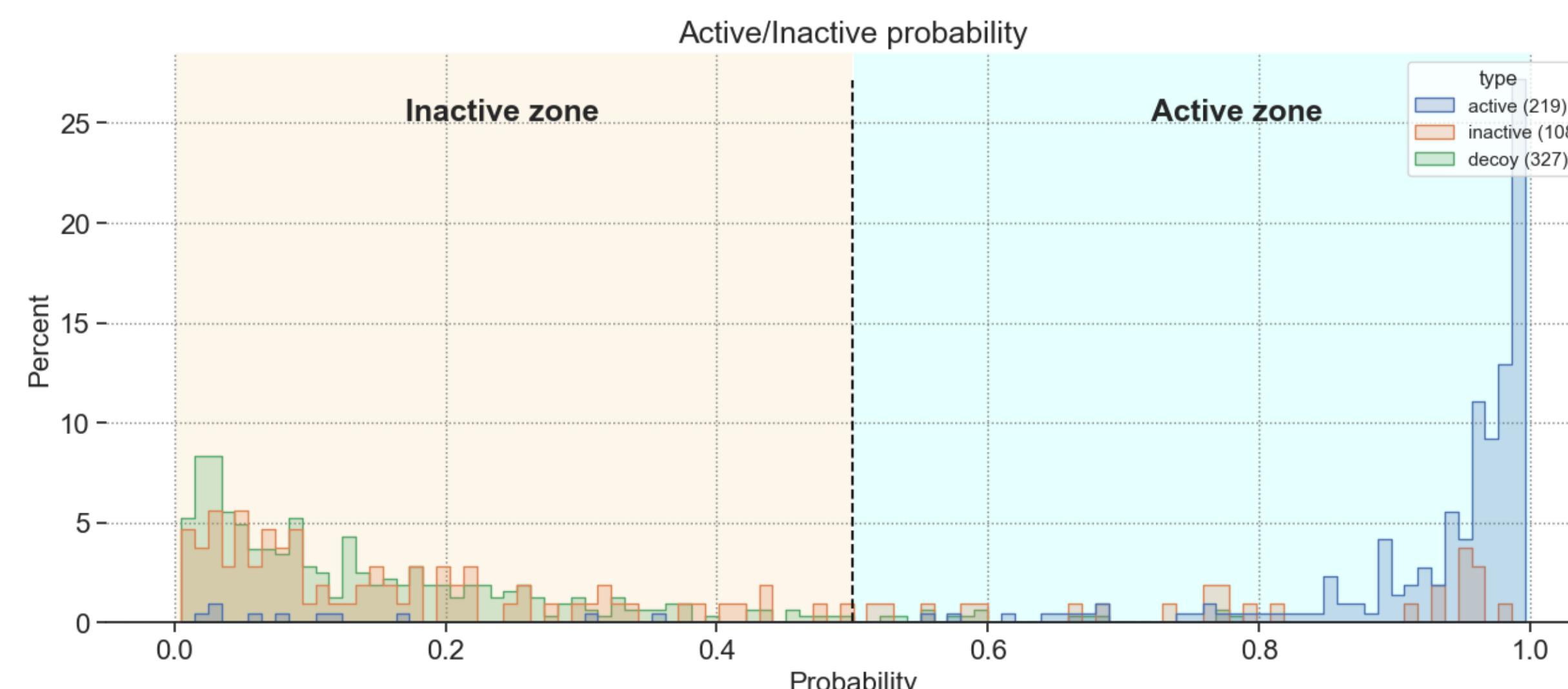
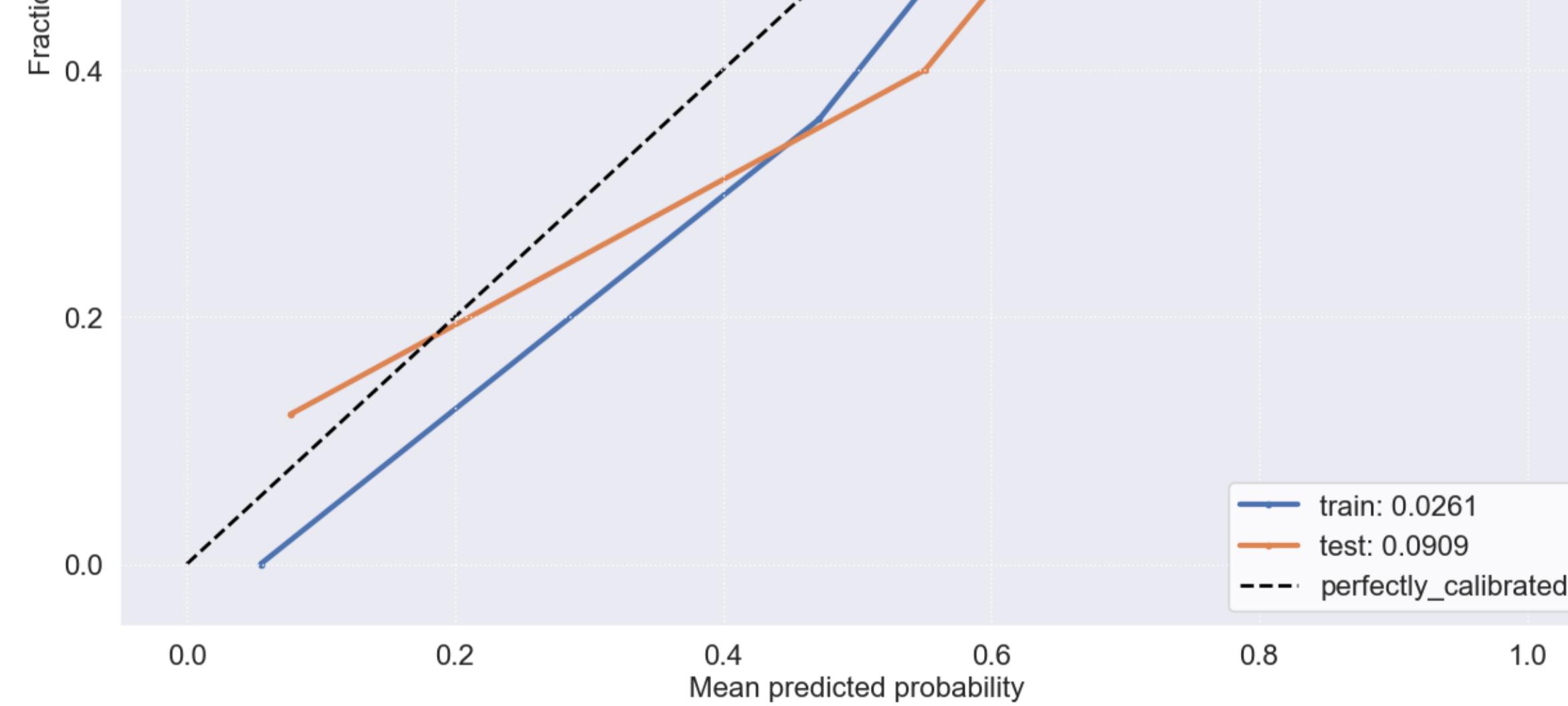
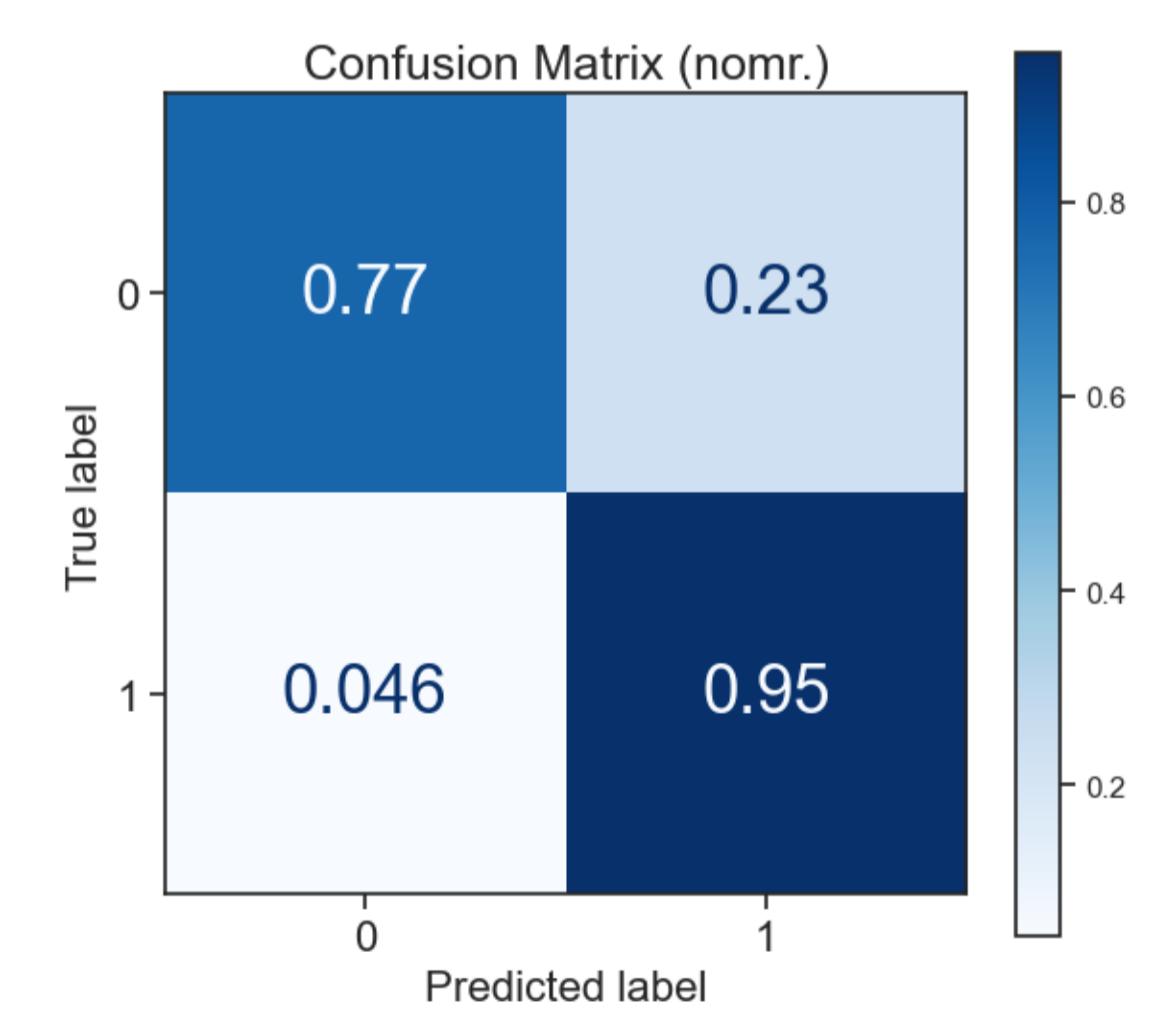
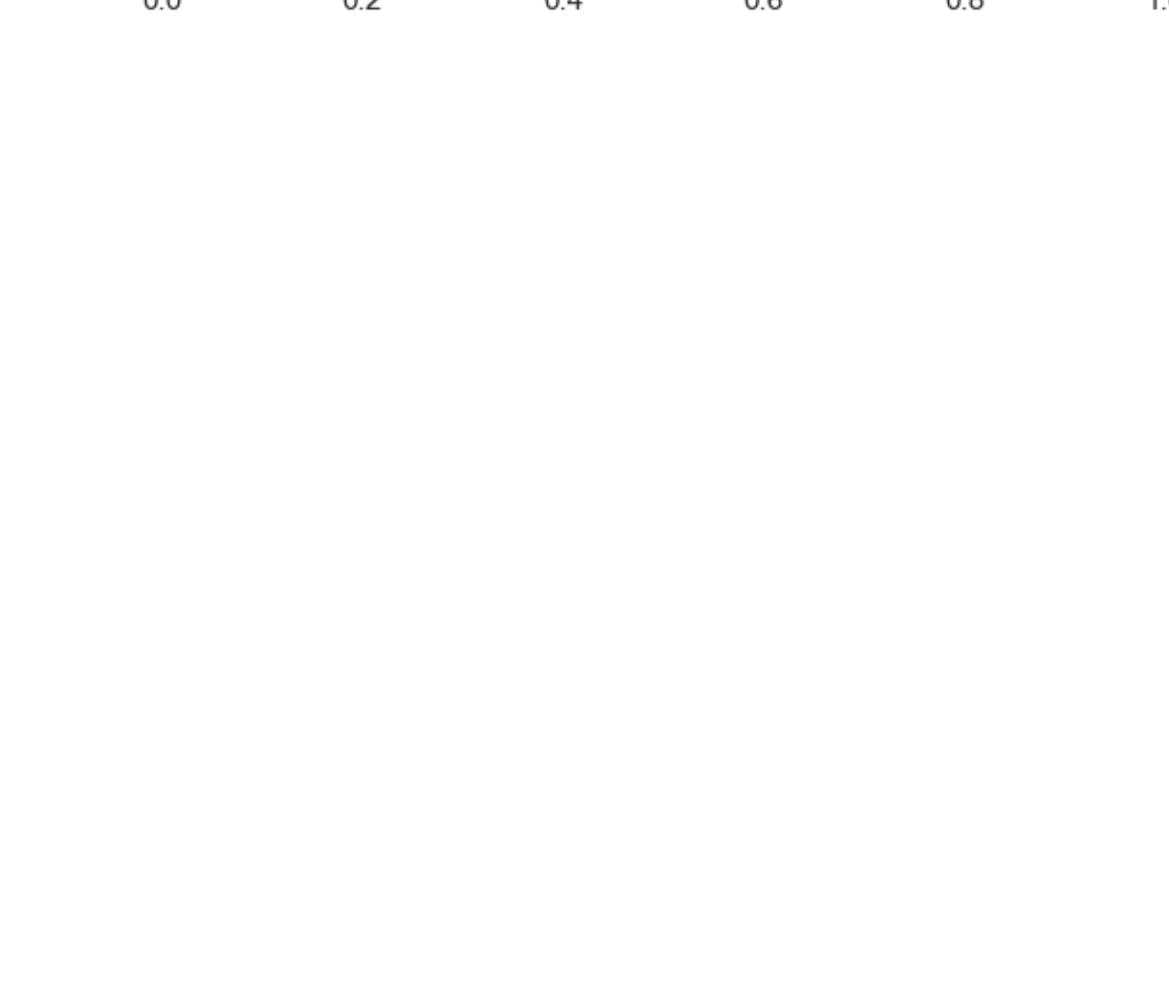
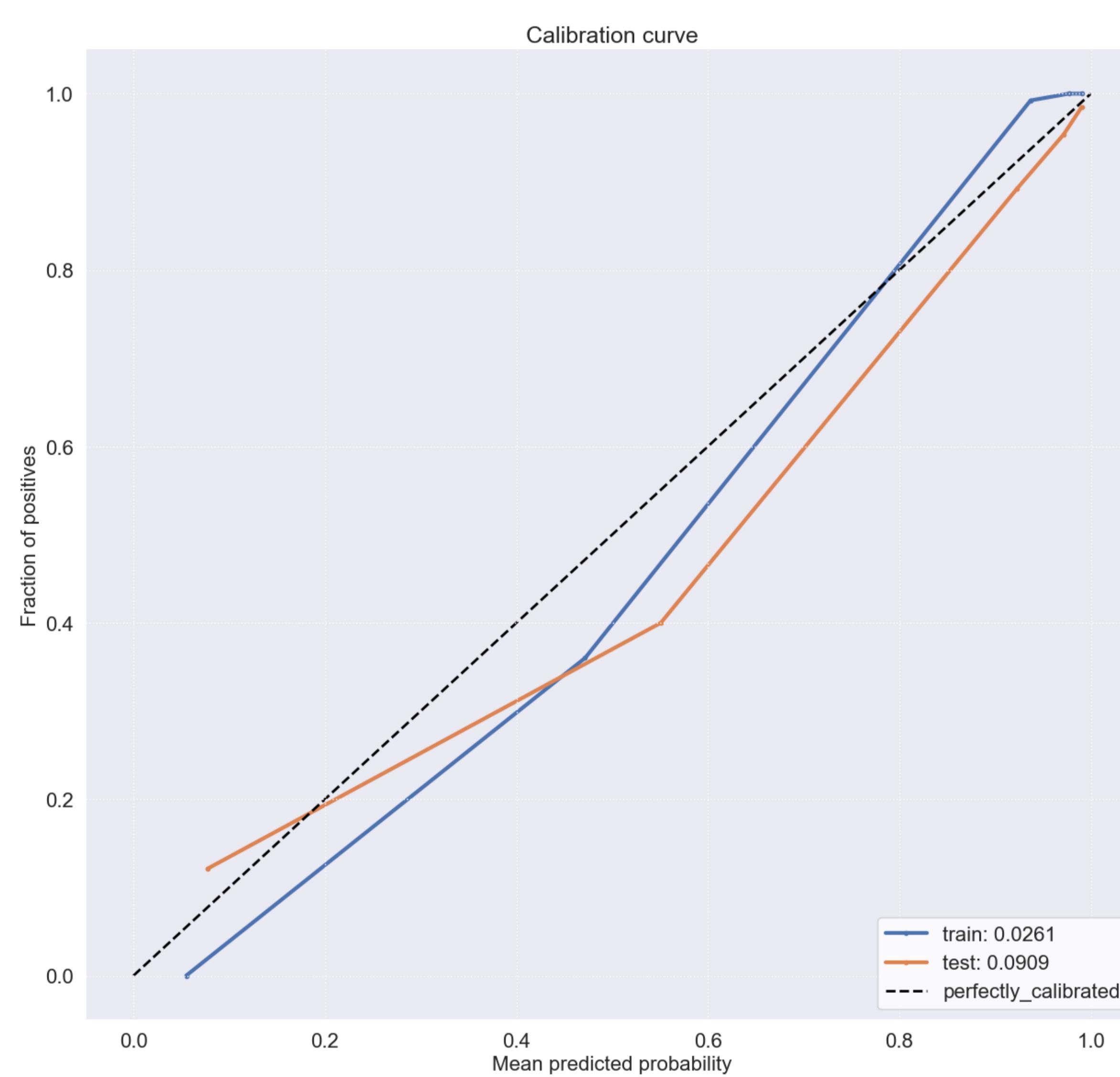
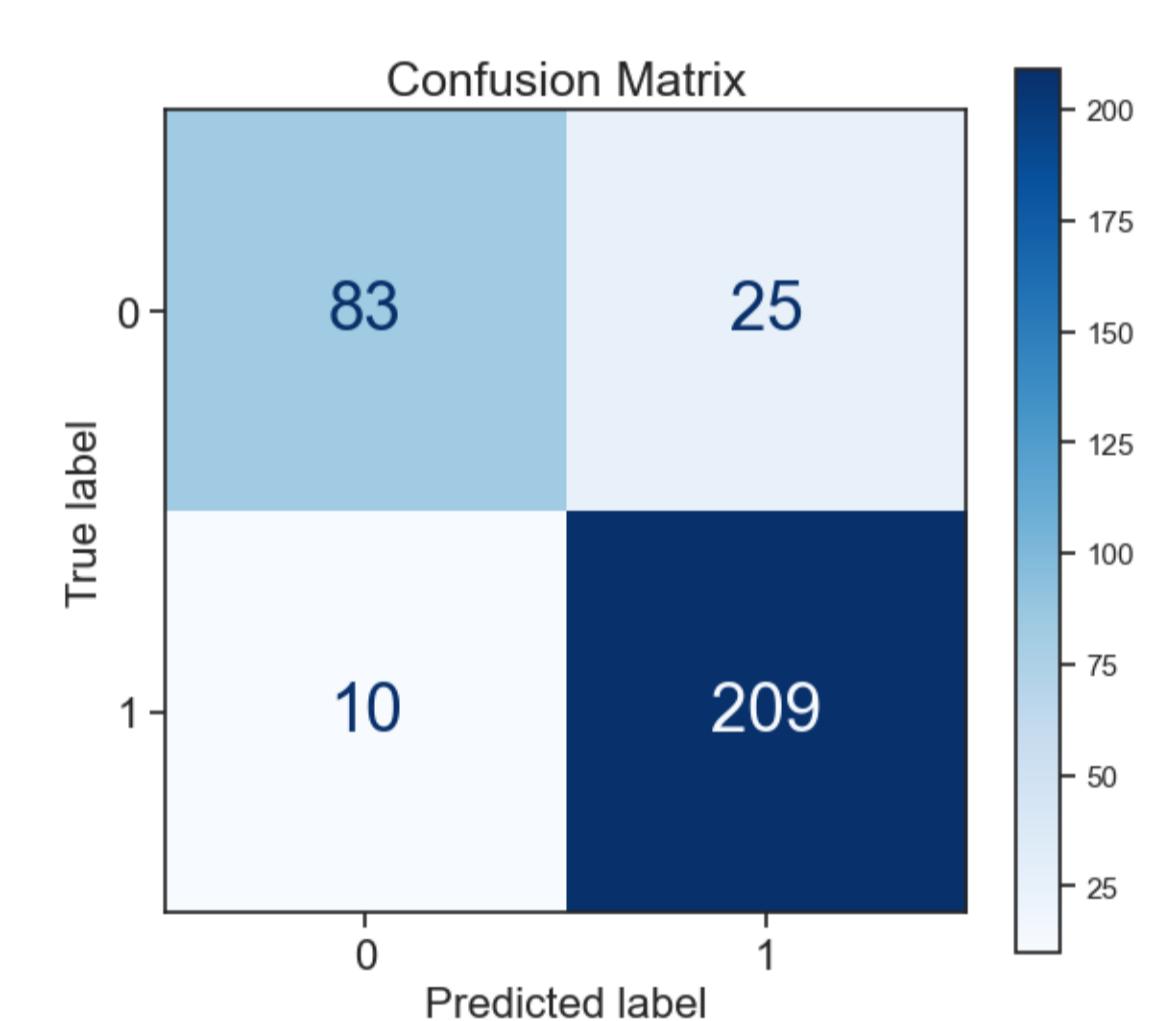
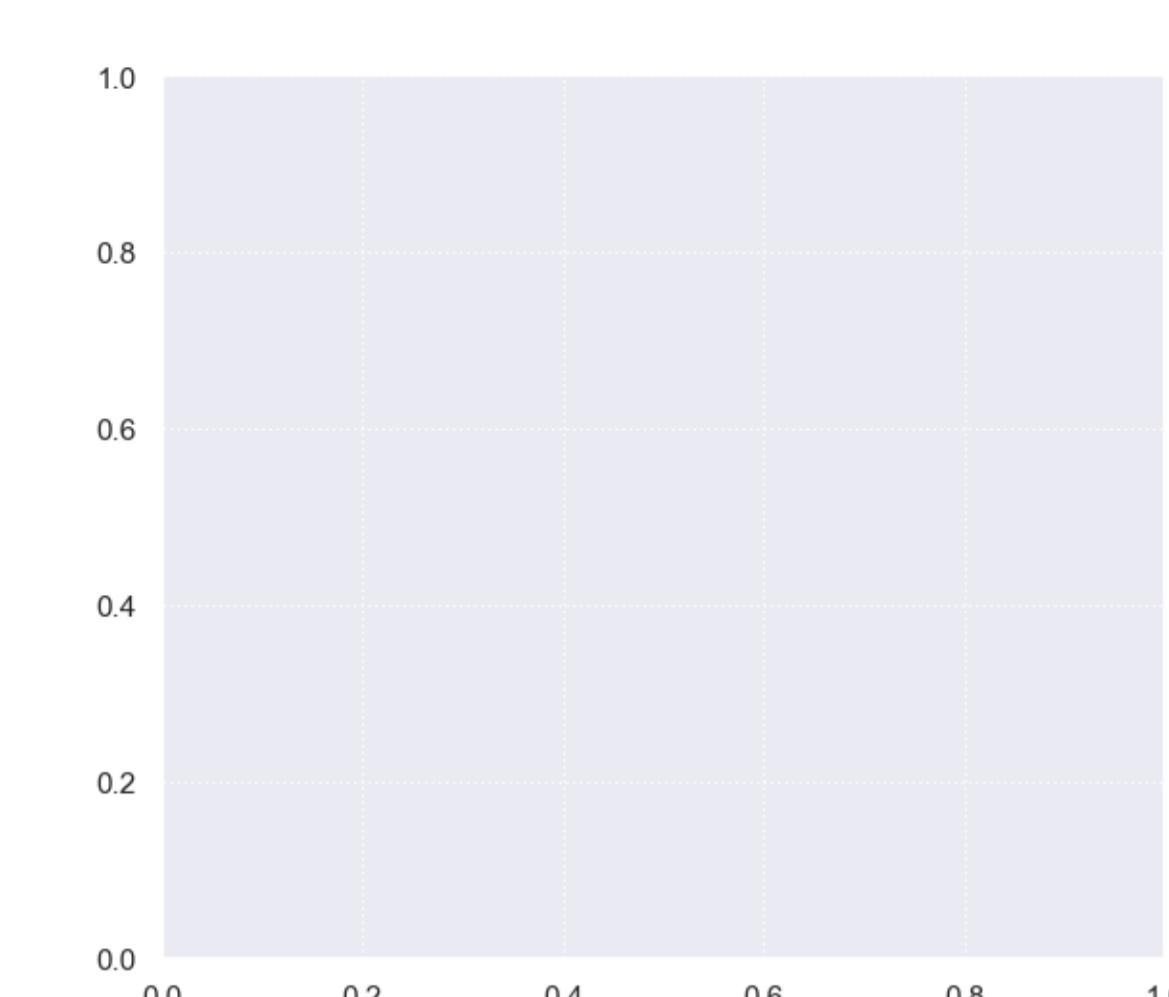
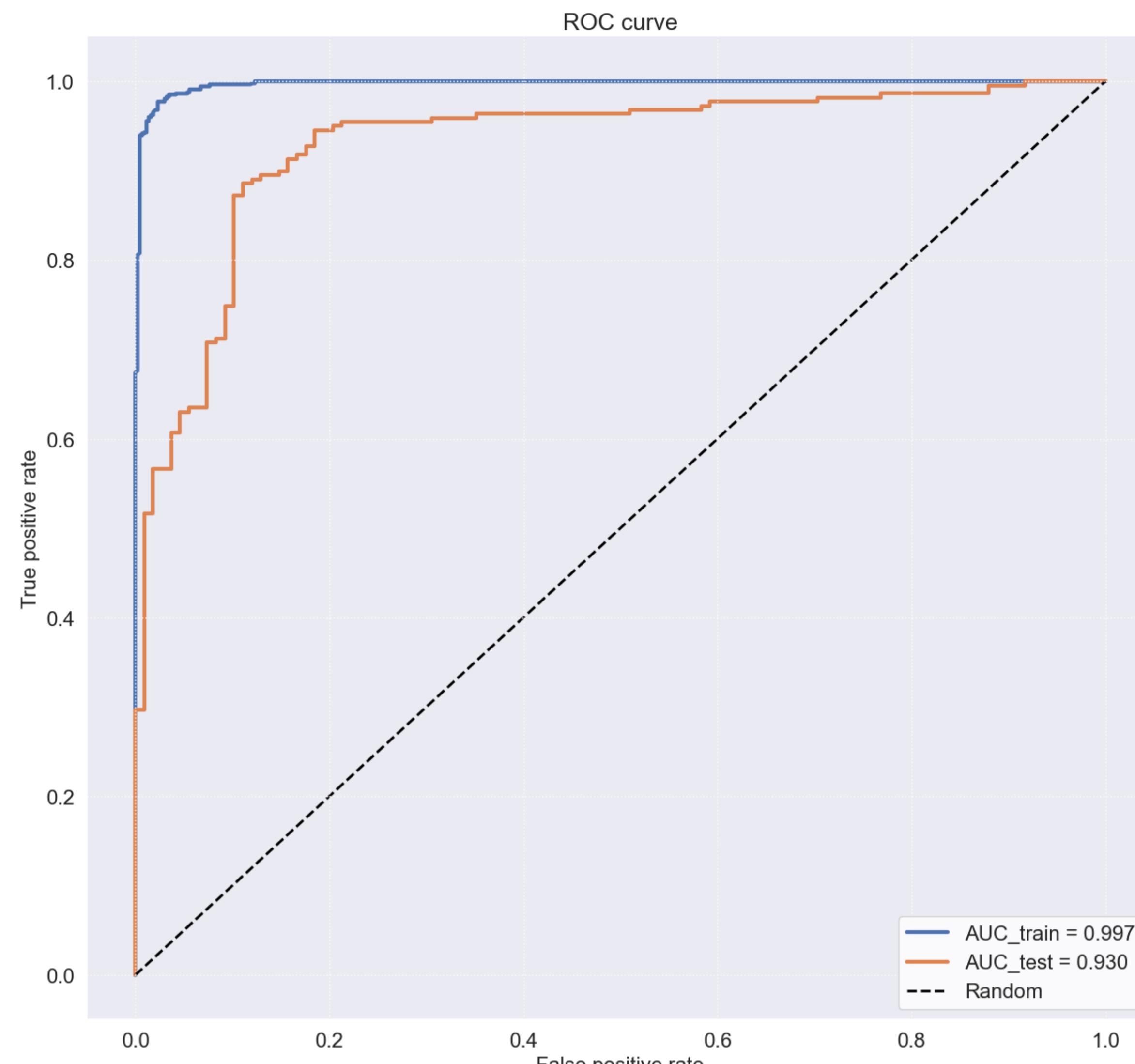
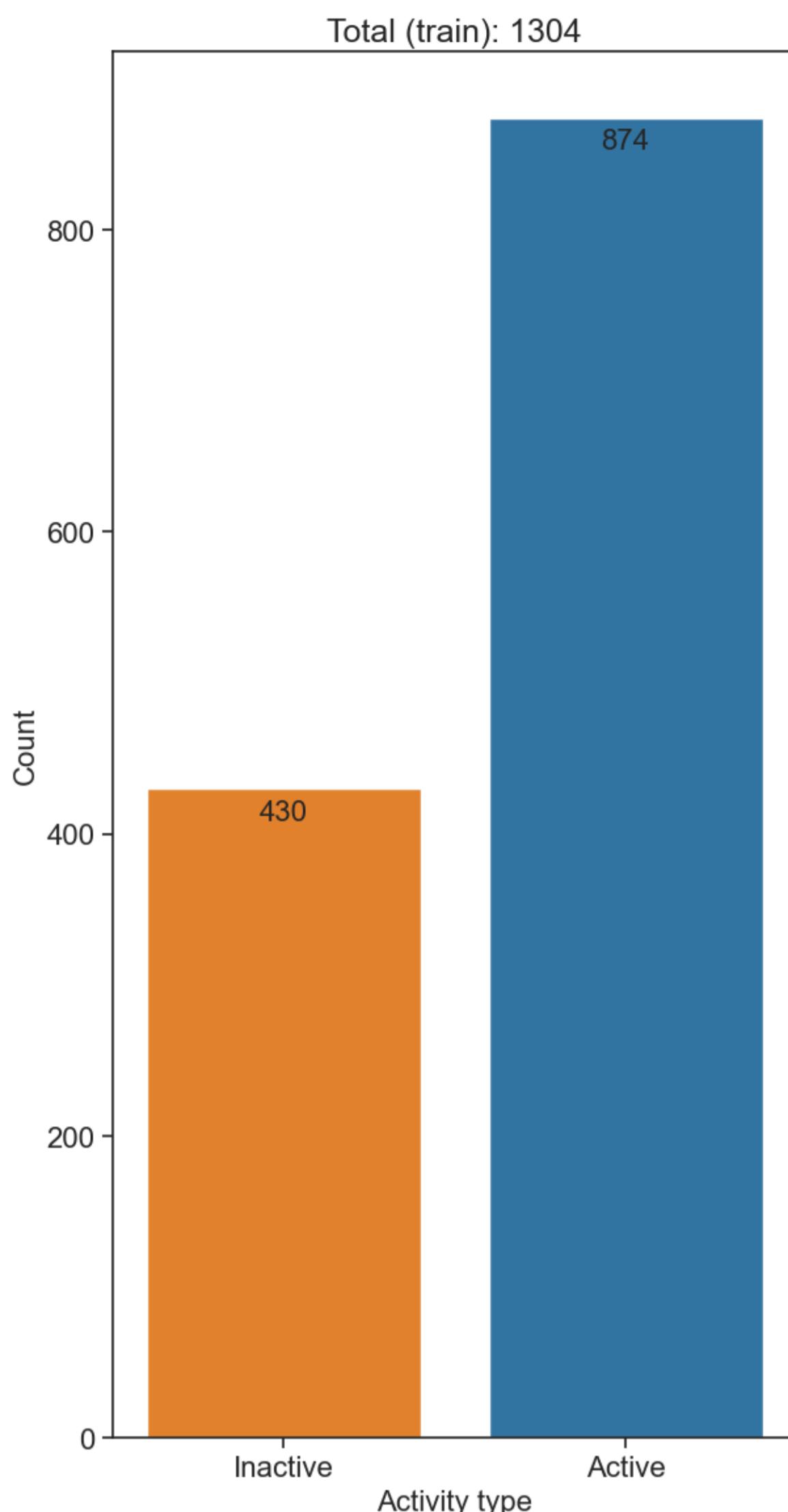


XGBoost Parameters	Value
alpha	4.7725
colsample_bytree	0.9572
gamma	0.3917
lambda	1.2964
learning_rate	0.4324
max_depth	9.0
min_child_weight	1.0
n_estimators	613.0
reg_alpha	0.1738
reg_lambda	0.0137
scale_pos_weight	1.5138
subsample	0.9005



Metric	Train	Test
AUC	0.9996	0.9191
accuracy	0.9939	0.8807
balanced accuracy	0.9913	0.8499
recall_(sens)	0.9989	0.9406
specificity	0.9837	0.7593
precision	0.992	0.8879
f1_score	0.9939	0.8786

Protein: Q92731 - metric: SoftVotingXGBoostEnsemble



Metric	Train	Test
AUC	0.9971	0.9297
accuracy	0.9716	0.893
balanced accuracy	0.9599	0.8614
recall_(sens)	0.9943	0.9543
specificity	0.9256	0.7685
precision	0.9645	0.8932
f1_score	0.9714	0.8907