

Analysis Results - Random Forest

importance_mean
regression
-0.578300464931165
0.6172724399208795
3.5195046457851524
1.0869446417871955
an simply predicting the mean target value. Results are unreliable; check for leakage, too few samples, or an unsuitable target.]]
ein_J10'], 'task_type': 'regression', 'n_estimators': 60, 'n_splits': 3, 'test_size': 0.25, 'fdr_threshold': 0.05, 'permutation_repeats': 10, 'run_univ
26.46154938227729], 'predicted': [25.471999634259124, 26.936447836395576, 26.285911949439157, 26.068680704552552, 25.082293
0.2987904185037841
0.14810342233363108
0.12854298155422195
0.11488864347349344
0.08716611921108502
0.06665934962251922
0.05627816929644042
0.04584344171510831
0.031969590612698336
0.021757863677018142

Pre-Modeling Statistics

Feature	Pearson r	Pearson FDR	Spearman rho	Spearman FDR	ANOVA F	ANOVA FDR	Sig?
Protein_A01	0.0602	0.8722	0.0962	0.9807	0.0654	0.8722	No
Protein_B02	-0.0739	0.8722	-0.0105	0.9849	0.0987	0.8722	No
Protein_C03	-0.5620	0.0591	-0.5233	0.1177	8.3084	0.0591	No
Protein_D04	0.0401	0.8722	-0.0045	0.9849	0.0290	0.8722	No
Protein_E05	-0.0983	0.8722	-0.1263	0.9807	0.1755	0.8722	No
Protein_F06	-0.5386	0.0591	-0.5038	0.1177	7.3537	0.0591	No
Protein_G07	-0.2090	0.7532	-0.2722	0.6142	0.8218	0.7532	No
Protein_H08	0.0384	0.8722	0.0602	0.9849	0.0266	0.8722	No

Protein_I09	-0.5239	0.0591	-0.3925	0.2899	6.8107	0.0591	No
Protein_J10	-0.2396	0.7532	-0.2391	0.6200	1.0962	0.7532	No

Permutation Importance

Feature	Mean	SD
Protein_F06	0.1945	0.2650
Protein_I09	0.1922	0.1650
Protein_J10	0.1712	0.1825
Protein_C03	0.1688	0.1437
Protein_G07	0.1142	0.1712
Protein_A01	0.0137	0.0338
Protein_H08	0.0081	0.0092
Protein_D04	-0.0137	0.0084
Protein_B02	-0.0147	0.0365
Protein_E05	-0.0826	0.0891

SHAP Values

Feature	Mean Abs
Protein_F06	0.4343
Protein_J10	0.2639
Protein_I09	0.2489
Protein_C03	0.2472
Protein_G07	0.2188
Protein_A01	0.1046
Protein_B02	0.0368
Protein_E05	0.0305
Protein_H08	0.0237
Protein_D04	0.0188

Per-Split Model Metrics

Split	R ²	MSE
	-0.9580	4.9474
	0.2923	3.2985
	-1.0692	2.3126
Mean ± SD	-0.5783 ± 0.6173	3.5195 ± 1.0869