

CXCL9 Single-Gene Model Performance Validation					
Analysis	Metric ¹	Value	p-value	95% CI	n
Laboratory full model	R ²	0.128	1.873034e-05	—	136
Laboratory train-test validation	Pearson r	0.492	1.081093e-03	[0.217, 0.695]	41
Laboratory train-test validation	RMSE	6.363	—	—	41
Laboratory train-test validation	MAE	5.291	—	—	41
Field cross-population correlation	Pearson r	0.172	1.536603e-03	[0.066, 0.274]	336
¹ RMSE = Root Mean Squared Error; MAE = Mean Absolute Error					