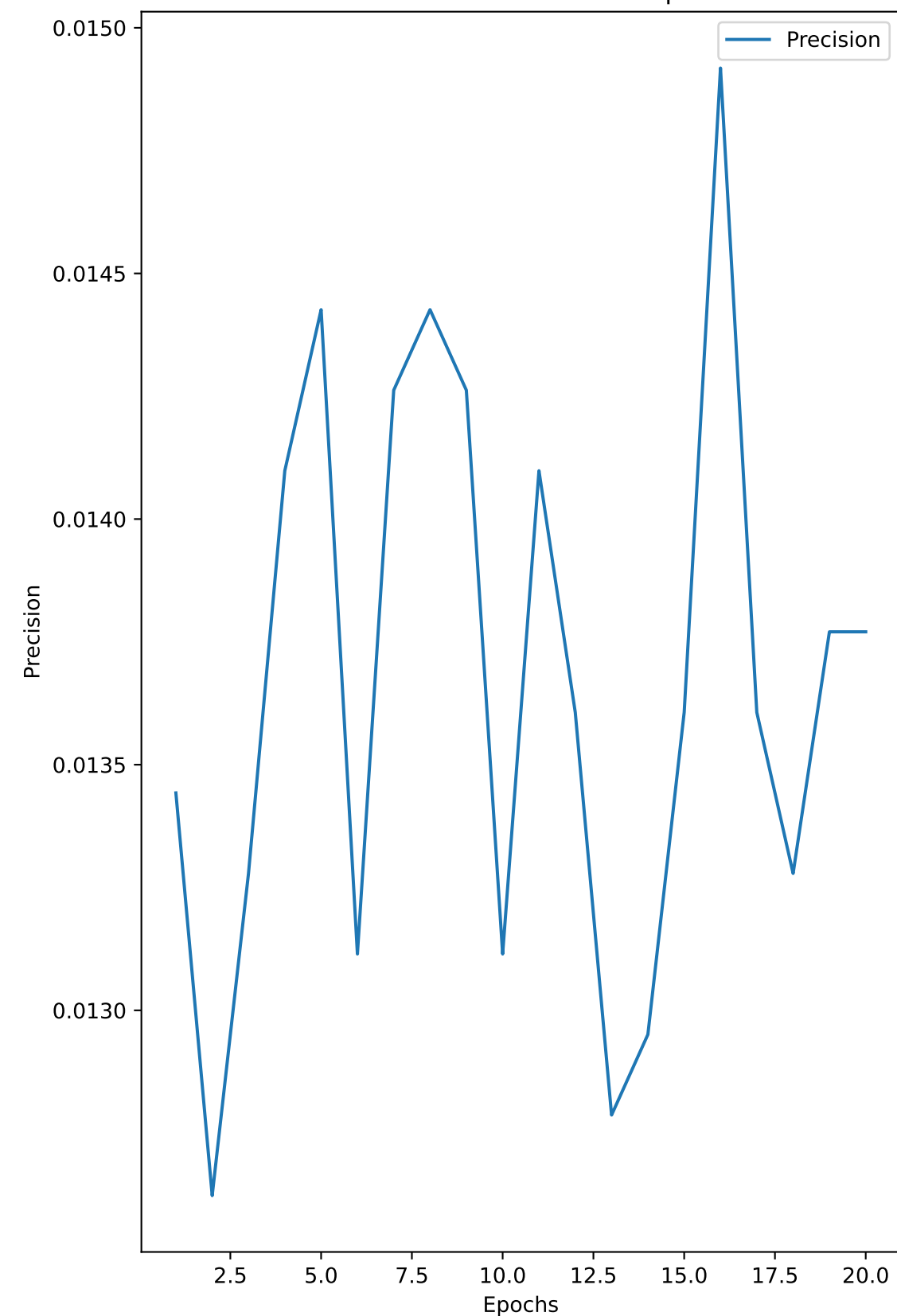


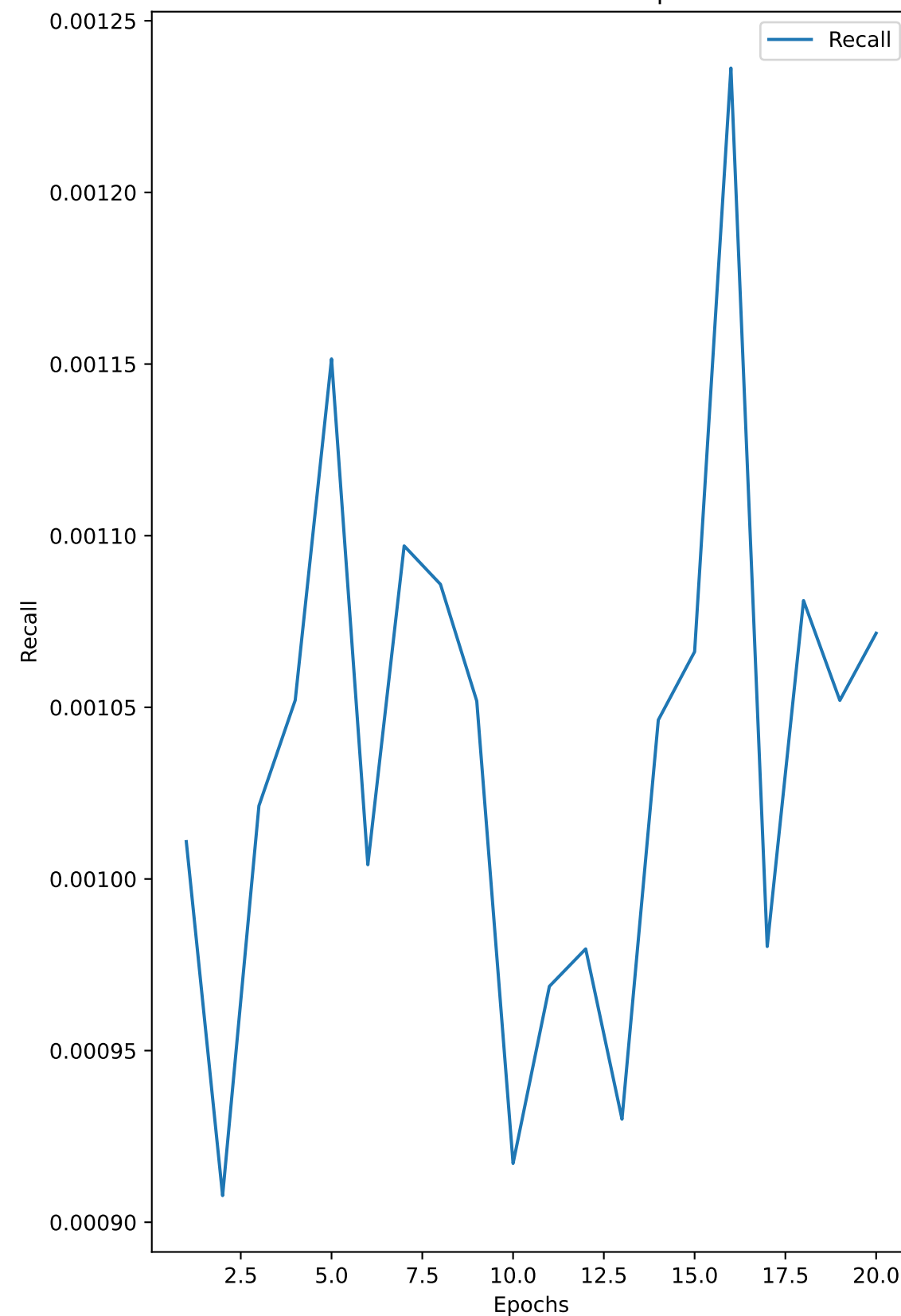
BPR Model - Evaluation Results

Metric	Value
Precision@10	0.0015
Recall@10	0.0005
Hit Ratio@10	0.0148
NDCG@10	0.0148
MAP@10	0.0148
F1 Score@10	0.0007

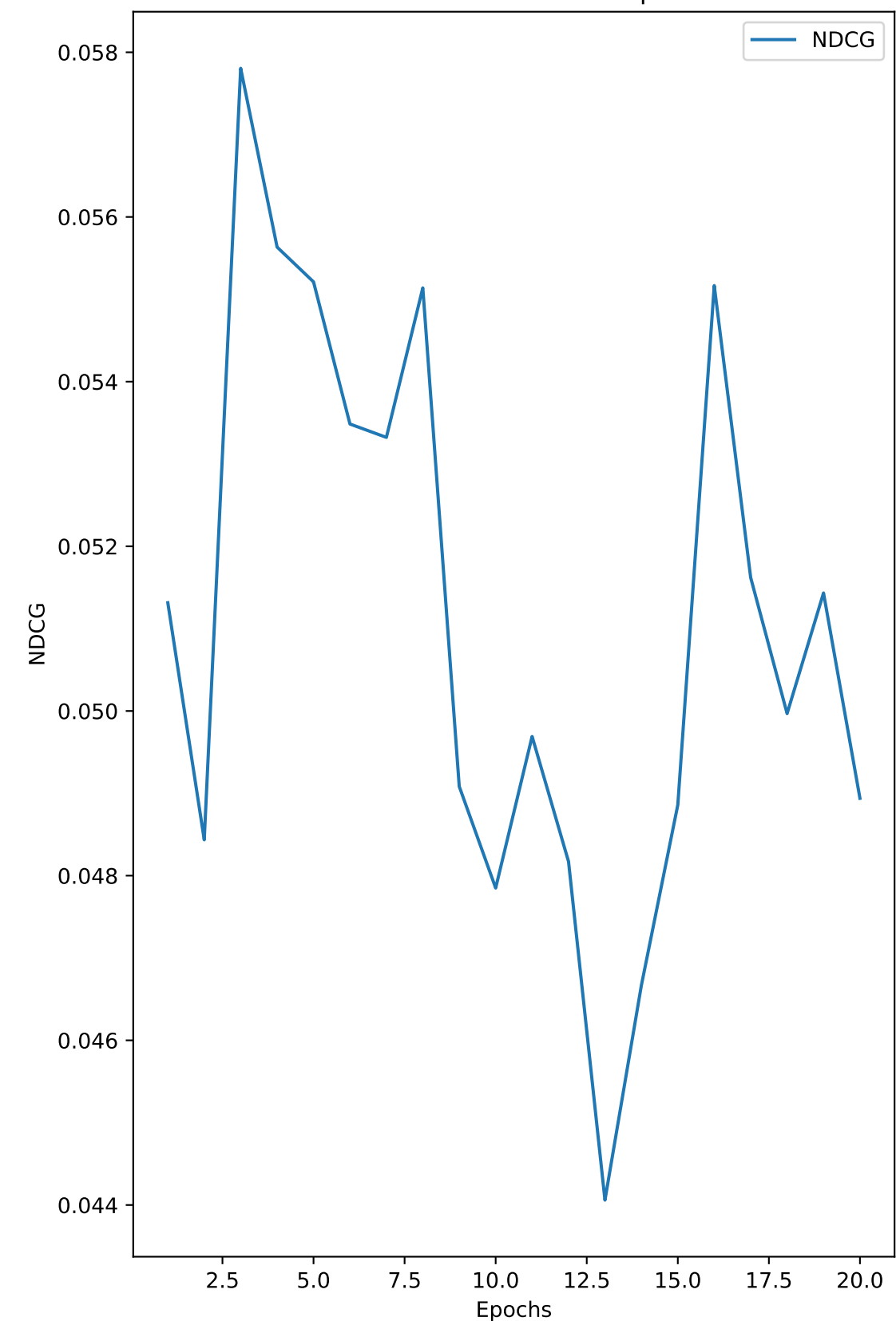
APR Model - Precision over Epochs



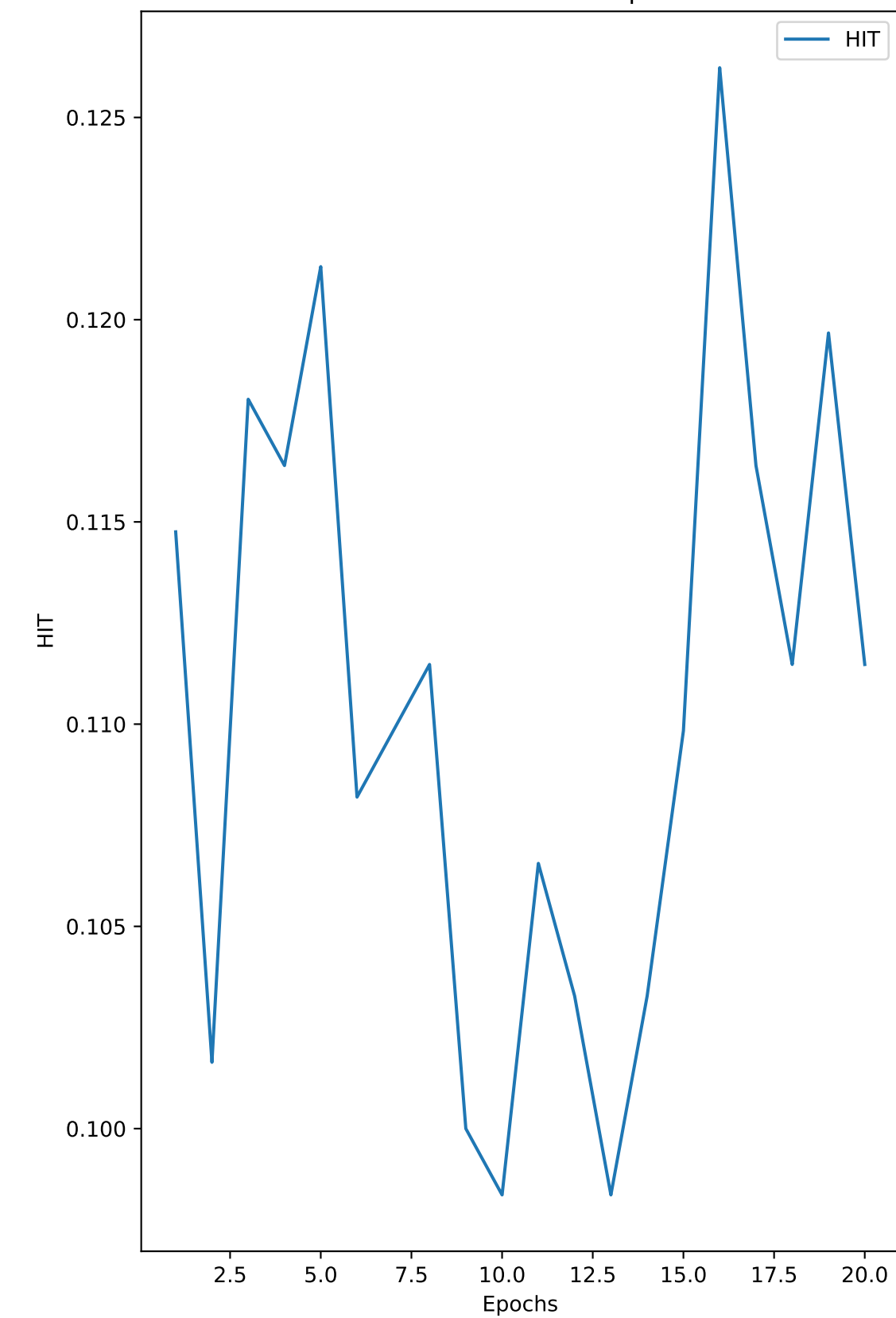
APR Model - Recall over Epochs



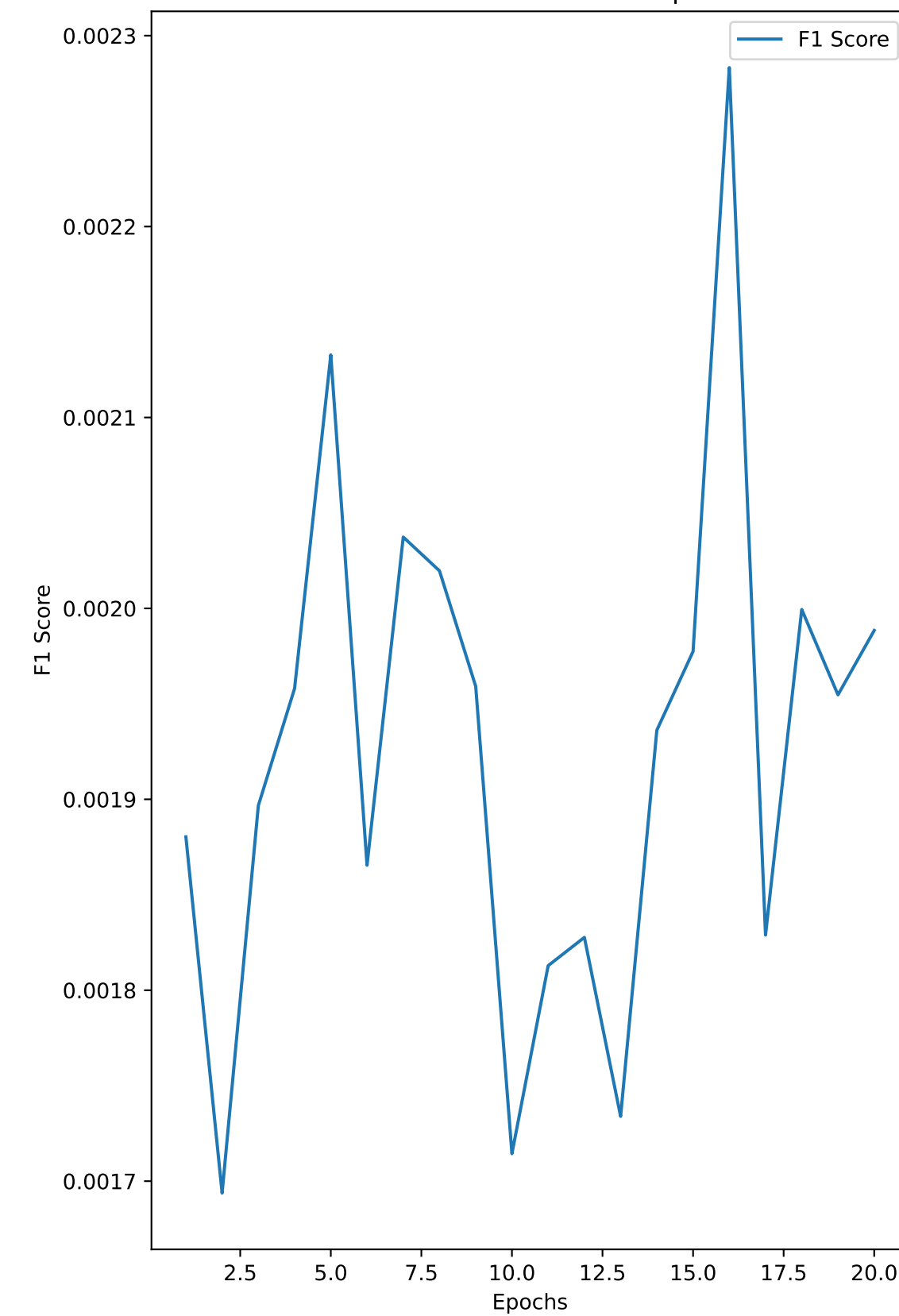
APR Model - NDCG over Epochs



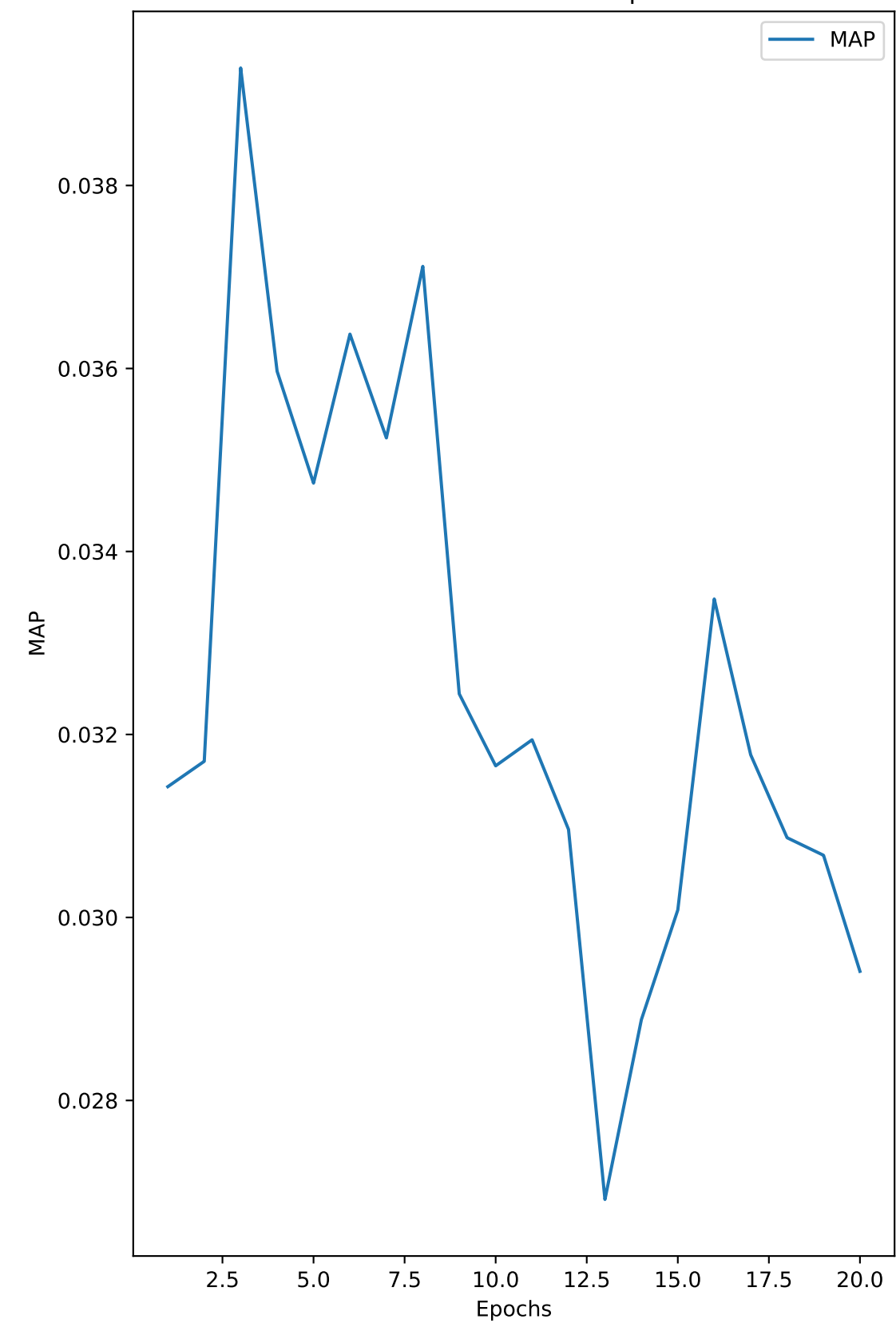
APR Model - HIT over Epochs



APR Model - F1 Score over Epochs



APR Model - MAP over Epochs



APR Model - Evaluation Results

Metric	Value
Precision@10	0.0048
Recall@10	0.0012
Hit Ratio@10	0.0443
NDCG@10	0.0177
MAP@10	0.0101
F1 Score@10	0.0019