

IRF1 SCEPTRE vs Seurat With Pvalue QC Summary

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Introduction

In this writeup I will change the method of QC for the CHIP-seq data to be such that peaks are only called if they are in the top α percentile of peaks with respect to the pvalue reported. I will return the odds ratios that SCEPTRE and Seurat give with respect to the post-QC chipseq data. For more information such as the actual number of discoveries, see “IRF1-analysis-pval-QC-individual”.

Table 1: Enrichment odds ratios, comparing to ChIP-seq target assignments with changing pvalue quantile threshold

Ground truth \ Method	SCEPTRE	Seurat	SCEPTRE-pval	Seurat-pval
0.1	2.13	2.18	$1.80e - 53$	$1.70e - 59$
0.25	2.43	2.43	$3.60e - 66$	$2.34e - 69$
0.5	3.07	2.96	$7.52e - 81$	$1.82e - 78$
0.75	3.93	3.75	$2.18e - 75$	$1.83e - 72$