

STAT1 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 “STAT1-analysis-pval-QC-individual”.

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

Ground truth \ Method	Method			
	SCEPTRE	Seurat	SCEPTRE-pval	Seurat-pval
0.1	1.36	1.28	$6.67e-12$	$8.69e-09$
0.25	1.30	1.23	$4.47e-10$	$4.37e-07$
0.5	1.25	1.16	$3.61e-09$	$5.23e-05$
0.75	1.31	1.24	$3.36e-12$	$9.97e-09$