TF SCEPTRE vs Seurat in monocytes, with same QC

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Introduction

This analysis aims to see if Seurat and SCEPTRE differ on finding general TF targets. I will create a table with the odds ratio and corresponding pvalues for each method across TFs. The results are below and show that while both methods perofrm similarly, SCEPTRE outperforms Seurat slightly on STAT1,IRF1,and SMAD4.

Table 1: Enrichment odds ratios, comparing to database and our ChIP-seq target assignments.

Ground truth Method	SCEPTRE	Seurat	Pvalue-SCEPTRE	Pvalue-Seurat
STAT1	1.202	1.183	0.000	0.000
STAT2	4.031	4.039	0.000	0.000
BRD4	0.866	1.172	0.180	0.076
MYC	1.090	0.991	0.708	0.937
SMAD4	1.257	1.227	0.000	0.001
IRF1	1.142	1.056	0.008	0.272