

Method	Network type	Subsampling Percent					
		5%	10%	15%	20%	25%	30%
		Low Abundance					
Direct	Clone-based	InSRWFB	InSRWFB	InSRWFB	InSRWFB	InSRWFB	InSRWFB
	Abundance-based	InSRWFB	InSRWFB	InSRWFB	InSRWFB	InSRWFB	InSRWFB
Combined	Clone-based	InSRWFB	InSRWFB	InSRWFB	InSRWFB	InSRWFB	InSRWFB
	Abundance-based	InSRWFB	InSRWFB	InSRWFB	InSRWFB	InSRWFB	InSRWFB
		Medium Abundance					
Direct	Clone-based	InSRWFB	InSRWFB	InSRWFB	InSRWFB	InSRWFB	InSRWFB
	Abundance-based	InSRWFB	InSRWFB	InSRWFB	InSRWFB	InSRWFB	InSRWFB
Combined	Clone-based	InSRWFB	InSRWFB	InSRWFB	InSRWFB	InSRWFB	InSRWFB
	Abundance-based	InSRWFB	InSRWFB	InSRWFB	InSRWFB	SB	SB
		High Abundance					
Direct	Clone-based	InSRWFB	InSRWFB	InSRWFB	InSRWFB	InSRWFB	InSRWFB
	Abundance-based	InSRWFB	InSRWFB	InSRWFB	InSRWFB	InSRWFB	InSRWFB
Combined	Clone-based	InSRWFB	InSRWFB	InSRWFB	InSRWFB	SB	SB
	Abundance-based	InSRWFB	InSRWFB	InSRWFB	InSRWFB	InSRWFB	InSRWFB

	InMH
	InPR
	InSRWFB
	MH
	PR
	RNS
	SB
	SRWFB

**Supplementary Figure 13.** Summary of best subsampling in different scenarios. Summary figure of per-scenario optimal method (lowest PDiv): most cells indicate InSRWFB (red), with occasional SB (pink).