Magnetic Resonance Imaging (MRI) Parameters

Scanner type	Scan series	Matrix	Slices	FOV	wResolution (mm)	TR (ms)	TE (ms)	TI (ms)	Flip Angle (deg)	Acceleration	MultiBand Acceleration	Phase Partial Fourier	Diffusion Directions	b-values	Acquisition Duration (min)
Siemens	T1	320 x 300	208	256 x 240	0.8 x 0.8 x 0.8	2400	2.24	1060	8	2.4 CS	Off	None	N/A	N/A	4:17
	T2	320 x 300	208	256 x 240	0.8 x 0.8 x 0.8	4500	116	N/A	Variable	4 CS	Off	Allowed	N/A	N/A	4:18
	Diffusion	140 x 140	87	238 x 238	1.7 x 1.7 x 1.7	4800	88	N/A	78/160	None	3	0.75	75 for AP and PA	0 (20), 500 (12), 1000 (24), 2000 (36), 3000 (58)	2 x 6:24
	fMRI	112 x 112	76	224 x 224	2.0 x 2.0 x 2.0	1725	37	N/A	62	None	4	Off	N/A	N/A	2 x 7:41
	qMRI	176 x 176	128	228 x 228	1.3 x 1.3 x 1.3	4500	2.3	100, 1000, 1900, 2700	4	2.7	Off	None	N/A	N/A	4:14
GE	T1	320 x 300	208	256 x 240	0.8 x 0.8 x 0.8	2400	3.3	1060	8	1.25 CS/2 ARC	Off	None	N/A	N/A	4:05
	T2	320 x 300	208	256 x 240	0.8 x 0.8 x 0.8	2500	98	N/A	Variable	1.01 CS/ 2x2 ARC	Off	None	N/A	N/A	4:07
	Diffusion	140 x 140	87	238 x 238	1.7 x 1.7 x 1.7	4800	88	N/A	80/160	None	3	0.643	74 for AP; 75 for PA	0 (20), 500 (12), 1000 (24), 2000 (36), 3000 (58)	6:10 (AP) + 6:14 (PA)
	fMRI	112 x 112	76	224 x 224	2.0 x 2.0 x 2.0	1725	37	N/A	62	None	4	Off	N/A	N/A	2 x 7:30
	qMRI	176 x 176	128	228 x 228	1.3 x 1.3 x 1.3	4500	2.3	100, 1000, 1900, 2700	4	1.8	Off	None	N/A	N/A	4:15

Magnetic Resonance Imaging (MRI) Parameters

Scanner type	Scan series	Matrix	Slices	FOV	wResolution (mm)	TR (ms)	TE (ms)	TI (ms)	Flip Angle (deg)	Acceleration	MultiBand Acceleration	Phase Partial Fourier	Diffusion Directions	b-values	Acquisition Duration (min)
Phillips Ingenia CX	T1	320 x 300	208	256 x 240	0.8 x 0.8 x 0.8	2400	2.24	1060	8	2.5 CS	Off	None	N/A	N/A	3:57
	T2	320 x 300	208	256 x 240	0.8 x 0.8 x 0.8	2500	293	N/A	Variable	5.63 CS	Off	None	N/A	N/A	4:45
	Diffusion	140 x 140	87	238 x 238	1.7 x 1.7 x 1.7	4800	88	N/A	78/160	None	3	0.633	75 for AP and PA	0 (20), 500 (12), 1000 (24), 2000 (36), 3000 (58)	2 x 6:11.6
	fMRI	112 x 112	76	224 x 224	2.0 x 2.0 x 2.0	1725	37	N/A	62	None	4	0.765766	N/A	N/A	2 x 7:50.7
	qMRI	176 x 176	128	228 x 228	1.3 x 1.3 x 1.3	4500	2.3	100, 1000, 1900, 2700	4	2.5	Off	None	N/A	N/A	4:14
Phillips MR770	T1	320 x 300	208	256 x 240	0.8 x 0.8 x 0.8	2400	2.24	1060	8	2.5 CS	Off	None	N/A	N/A	3:57
	T2	320 x 300	208	256 x 240	0.8 x 0.8 x 0.8	2500	293	N/A	Variable	5.63 CS	Off	None	N/A	N/A	4:45
	Diffusion	140 x 140	87	238 x 238	1.7 x 1.7 x 1.7	4800	88	N/A	78/160	None	3	0.669	75 for AP and PA	0 (20), 500 (12), 1000 (24), 2000 (36), 3000 (58)	2 x 6:10.7
	fMRI	112 x 112	76	224 x 224	2.0 x 2.0 x 2.0	1725	37	N/A	62	None	4	0.855856	N/A	N/A	2 x 7:50.7
	qMRI	176 x 176	128	228 x 228	1.3 x 1.3 x 1.3	4500	2.3	100, 1000, 1900, 2700	4	2.5	Off	None	N/A	N/A	4:14

Magnetic Resonance Imaging (MRI) Parameters

ISTHMUS (Integrated Short-TE and Hadamard-edited Multi-Sequence)

Scanner type	Localization	Volume of interest (cm^3)	TR (s)	Short-TE (ms)	HERCULES TE (ms)	Short-TE Averages	HERCULES Averages	Water Suppression	Shim mode	Spectral width	Data points	HERCULES Editing Scheme	Water Ref TE (ms)	Water Ref	Acquisition Time (min)
Siemens	PRESS	Bilateral Thalamus 15.9	2	35	80	32	224	Water Saturation	Brain; True Form	2	2048	A: 4.58, 1.9 B: 4.18, 1.9 C: 4.58 D: 4.18	35; 80	4; 4	8:48
Phillips	PRESS	Bilateral Thalamus 15.9	2	35	80	32	224	VAPOR	PB-auto (2nd)	2	2048	A: 4.58, 1.9 B: 4.18, 1.9 C: 4.58 D: 4.18	35; 80	4; 4	8:48
GE	PRESS	Bilateral Thalamus 15.9	2	35	80	32	224	VAPOR	Auto	2	2048	A: 4.58, 1.9 B: 4.18, 1.9 C: 4.58 D: 4.18	35; 80	4; 4	8:48