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\\MedPhys\TM\Qingping\QA_MAGMA\product_QA_t1_se_tran_slice11_rep2

TA: 4:20 min Coil Selection: Manual Voxel Size: 1.0×1.0×5.0 mm³ Rel. SNR: 1.00**Properties**

Start measurement without further preparation	On
Wait for User to Start	Off
Start measurements	Single Measurement
Prio Recon	Off
Auto Open Inline Display	Off
Auto Close Inline Display	Off
Load Images to MR View&GO	On
Auto Store Images	On
Disable auto transfer to PACS	Off
Load Images to Stamp Segments	On
Load Images to Graphic Segments	Off
Graphic segment	Default
Inline Movie	Off

Routine

Slice Group	1
Slices	11
Distance Factor	100 %
Position	L1.7 P5.5 F4.2 mm
Orientation	Transversal
Phase Encoding Dir.	A >> P
Phase Oversampling	0 %
FOV Read	250 mm
FOV Phase	100.0 %
Slice Thickness	5.0 mm
TR	500.0 ms
TE	20.00 ms
Averages	1
Concatenations	1
AutoAlign	---
Coil Elements	HE1-4;NE1,2

Contrast - Common

TR	500.0 ms
TE	20.00 ms
MTC	Off
Magn. Preparation	None
Flip Angle 1	90 deg
Flip Angle 2	180 deg
Fat-Water Contrast	Standard
Dark Blood	Off
Blood Suppression	Off
Contrasts	1
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	2
Pause after Meas. 1	0.0 s
Multiple Series	Off

Resolution - Common

FOV Read	250 mm
FOV Phase	100.0 %
Slice Thickness	5.0 mm
Base Resolution	256
Phase Resolution	100 %
Interpolation	Off

Resolution - Acceleration

Deep Resolve	Off
Phase Partial Fourier	Off
Asymmetric Echo	Off

Resolution - Filter

Raw Filter	Off
Elliptical Filter	Off
Distortion Correction	2D
Normalize	Off
Image Filter	Off

Geometry - Common

Slice Group	1
Slices	11
Distance Factor	100 %
Position	L1.7 P5.5 F4.2 mm
Orientation	Transversal
Phase Encoding Dir.	A >> P
Phase Oversampling	0 %
FOV Read	250 mm
FOV Phase	100.0 %
Slice Thickness	5.0 mm
TR	500.0 ms
Multi-Slice Mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice Group	1
Position	L1.7 P5.5 F4.2 mm
Orientation	Transversal
Phase Encoding Dir.	A >> P
AutoAlign	---
Initial Position	L1.7 P5.5 F4.2
L	1.7 mm
P	5.5 mm
F	4.2 mm
Initial Orientation	Transversal
Initial Rotation	0.00 deg

Geometry - Saturation

Special Saturation	None
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Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table Position	4 mm
Table Position	F
Inline Composing	Off

System - Miscellaneous

Coil Selection	Manual
Radial Sorting	Off
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combination	Sum of Squares
Matrix Optimization	Off

System - Adjustments

Adjustment Strategy	Standard
B0 Shim	Standard
B1 Shim	TrueForm
CoilShim	Off
Adjustment Tolerance	Auto
Adjust with Body Coil	Off
Confirm Frequency	Never
Assume Silicone	Off

System - Adjust Volume

Position	L1.7 P5.5 F4.2 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	250 mm
R >> L	250 mm
F >> H	105 mm
Reset	Off

System - pTx

B1 Shim	TrueForm
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System - Tx/Rx

Frequency 1H	123.205994 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Correction Factor	1.00
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	500.0 ms
Concatenations	1

Physio - Cardiac

Fat-Water Contrast	Standard
Magn. Preparation	None
Dark Blood	Off
FOV Read	250 mm

Physio - Cardiac

FOV Phase	100.0 %
Phase Resolution	100 %

Inline - Subtraction

Subtract	Off
Measurements	2
StdDev	Off
Save Original Images	On

Inline - MIP

MIP Sag	Off
MIP Cor	Off
MIP Tra	Off
MIP Time	Off
Radial MIP	Off
Save Original Images	On
MPR Sag	Off
MPR Cor	Off
MPR Tra	Off

Inline - Composing

Inline Composing	Off
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Inline - Open Recon

Algorithm	None
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Sequence - Part 1

Sequence Name	se
RF Pulse Type	Normal
Gradient Mode	Fast
Bandwidth	195 Hz/Px
Asymmetric Echo	Off

Sequence - Part 2

Introduction	Off
Acoustic noise reduction	Off

Sequence - Assistant

SAR Assistant	TR
Max. TR	500.0 ms
Allowed Delay	60 s

\\MedPhys\TM\Qingping\QA_MAGMA\pulseq_QA_t1_se_tran_sli11_rep2

TA: 4:16 min Coil Selection: Manual Voxel Size: 1.0×1.0×5.0 mm³ Acc:: None Rel. SNR: 1.00**Properties**

Start measurement without further preparation	On
Wait for User to Start	Off
Start measurements	Single Measurement
Prio Recon	Off
Auto Open Inline Display	Off
Auto Close Inline Display	Off
Load Images to MR View&GO	On
Auto Store Images	On
Disable auto transfer to PACS	Off
Load Images to Stamp Segments	Off
Load Images to Graphic Segments	Off
Graphic segment	Default
Inline Movie	Off

Routine

Slice Group	1
Slices	11
Distance Factor	100 %
Position	L1.7 P5.5 F4.2 mm
Orientation	Transversal
Phase Encoding Dir.	A >> P
FOV Read	250 mm
FOV Phase	100.0 %
Slice Thickness	5.0 mm
TR	100.000 ms
TE	10.00 ms
AutoAlign	---
Coil Elements	HE1-4;NE1,2

Contrast - Common

TR	100.000 ms
TE	10.00 ms
Fat-Water Contrast	Standard
Contrasts	1

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	2
Pause after Meas. 1	0.0 s

Resolution - Common

FOV Read	250 mm
FOV Phase	100.0 %
Slice Thickness	5.0 mm
Base Resolution	256
Phase Resolution	100 %

Resolution - Acceleration

Acceleration Mode	None
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Resolution - Filter

Raw Filter	Off
Elliptical Filter	Off
Distortion Correction	Off
Normalize	Off
Image Filter	Off

Geometry - Common

Slice Group	1
Slices	11
Distance Factor	100 %
Position	L1.7 P5.5 F4.2 mm
Orientation	Transversal
Phase Encoding Dir.	A >> P
FOV Read	250 mm
FOV Phase	100.0 %
Slice Thickness	5.0 mm
TR	100.000 ms
Series	Ascending

Geometry - AutoAlign

Slice Group	1
Position	L1.7 P5.5 F4.2 mm
Orientation	Transversal
Phase Encoding Dir.	A >> P
AutoAlign	---
Initial Position	L1.7 P5.5 F4.2
L	1.7 mm
P	5.5 mm
F	4.2 mm
Initial Orientation	Transversal
Initial Rotation	0.00 deg

Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table Position	4 mm
Table Position	F
Inline Composing	Off

System - Miscellaneous

Coil Selection	Manual
Radial Sorting	Off
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combination	Sum of Squares
Matrix Optimization	Off

System - Adjustments

Adjustment Strategy	Standard
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System - Adjustments

B0 Shim	Standard
B1 Shim	TrueForm
CoilShim	Off
Adjustment Tolerance	Auto
Adjust with Body Coil	Off
Confirm Frequency	Never
Assume Silicone	Off

System - Adjust Volume

Position	L1.7 P5.5 F4.2 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	250 mm
R >> L	250 mm
F >> H	105 mm
Reset	Off

System - pTx

B1 Shim	TrueForm
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System - Tx/Rx

Frequency 1H	123.205994 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Correction Factor	1.00
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	100.000 ms

Inline - Open Recon

Algorithm	None
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Sequence - Part 1

Sequence Name	QA_T1
Dimension	2D
Gradient Mode	Fast

Sequence - Part 2**Sequence - Nuclei**

TX/RX Nucleus	1H
TX/RX Delta Frequency	0 Hz
TX Nucleus	None
TX Delta Frequency	0 Hz
Coil Elements	HE1-4;NE1,2

Sequence - Special

Pulseq file	qingping/QA_T1.seq
Execution mode	pulseq/run
Data handling	ICE STD
Timing and Flip Angles	adapt FA
FOV positioning	enabled

Sequence - Special

Orientation mapping	XYZ in TRA
libBalance / Grad health	interpolate
Gradient switching frequency	0 Hz
Number of runs	1
Delay after run(s)	0.00 ms
ADC length per segment	0
Use SET for SLC	Off
Delay before start	0 ms
Gradient scaling[1]	100.00 %
Gradient scaling[2]	100.00 %
Gradient scaling[3]	100.00 %
MoCo Level	off

Sequence - Assistant

SAR Assistant	Off
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\\MedPhys\TM\Qingping\QA_MAGMA\product_QA_fmri_slice27_rep200_run1

TA: 6:44 min Coil Selection: Manual Voxel Size: 3.4×3.4×4.0 mm³ Acc:: None Rel. SNR: 1.00**Properties**

Start measurement without further preparation	On
Wait for User to Start	Off
Start measurements	Single Measurement
Prio Recon	Off
Auto Open Inline Display	Off
Auto Close Inline Display	Off
Load Images to MR View&GO	On
Auto Store Images	On
Disable auto transfer to PACS	Off
Load Images to Stamp Segments	Off
Load Images to Graphic Segments	Off
Graphic segment	Default
Inline Movie	Off

Routine

Slice Group	1
Slices	27
Distance Factor	25 %
Position	R1.1 P3.3 F1.7 mm
Orientation	Transversal
Phase Encoding Dir.	A >> P
Phase Oversampling	0 %
FOV Read	220 mm
FOV Phase	100.0 %
Slice Thickness	4.0 mm
TR	2000.0 ms
TE	24.00 ms
Averages	1
Concatenations	1
AutoAlign	---
Coil Elements	HE1-4;NE1,2

Contrast - Common

TR	2000.0 ms
TE	24.00 ms
MTC	Off
Flip Angle	90 deg
Fat-Water Contrast	Fat Saturation
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	200
Delay in TR	0.00 ms

Resolution - Common

FOV Read	220 mm
FOV Phase	100.0 %
Slice Thickness	4.0 mm

Resolution - Common

Base Resolution	64
Phase Resolution	100 %
Interpolation	Off

Resolution - Acceleration

Acceleration Mode	None
Phase Partial Fourier	Off

Resolution - Filter

Raw Filter	Off
Elliptical Filter	Off
Hamming	Off
Distortion Correction	Off
Static Field Correction	Off
Normalize	Off

Geometry - Common

Slice Group	1
Slices	27
Distance Factor	25 %
Position	R1.1 P3.3 F1.7 mm
Orientation	Transversal
Phase Encoding Dir.	A >> P
Phase Oversampling	0 %
FOV Read	220 mm
FOV Phase	100.0 %
Slice Thickness	4.0 mm
TR	2000.0 ms
Multi-Slice Mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice Group	1
Position	R1.1 P3.3 F1.7 mm
Orientation	Transversal
Phase Encoding Dir.	A >> P
AutoAlign	---
Initial Position	R1.1 P3.3 F1.7
R	1.1 mm
P	3.3 mm
F	1.7 mm
Initial Orientation	Transversal
Initial Rotation	0.00 deg

Geometry - Saturation

Special Saturation	None
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Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
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Geometry - Tim Planning Suite

Table Position	2 mm
Table Position	F
Inline Composing	Off

System - Miscellaneous

Coil Selection	Manual
Radial Sorting	Off
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combination	Sum of Squares
Matrix Optimization	Off

System - Adjustments

Adjustment Strategy	Standard
B0 Shim	Standard
B1 Shim	TrueForm
CoilShim	Off
Adjustment Tolerance	Auto
Adjust with Body Coil	Off
Confirm Frequency	Never
Assume Silicone	Off

System - Adjust Volume

Position	R1.1 P3.3 F1.7 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	220 mm
R >> L	220 mm
F >> H	134 mm
Reset	Off

System - pTx

B1 Shim	TrueForm
Excitation	Standard

System - Tx/Rx

Frequency 1H	123.205994 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Correction Factor	1.00
Image Scaling	0.800

Physio - Signal

1st Signal/Mode	None
TR	2000.0 ms
Log Signals	Off
Concatenations	1

BOLD

GLM Statistics	Off
Ignore Meas. at Start	0
Ignore After Transition	0

BOLD

Model Transition States	On
Temp. Highpass Filter	On
Threshold	4.00
Paradigm Size	3
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Active
Motion Correction	Off
Spatial Filter	Off
Measurements	200
Delay in TR	0.00 ms

Inline - Open Recon

Algorithm	None
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Sequence - Part 1

Sequence Name	epfid
Excitation	Standard
RF Pulse Type	Normal
Gradient Mode	Fast
Bandwidth	1954 Hz/Px
Echo Spacing	0.58 ms
Free Echo Spacing	Off
EPI Factor	64

Sequence - Part 2

Introduction	Off
Ghost Reduction	Off

Sequence - Assistant

SAR Assistant	Off
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\\MedPhys\TM\Qingping\QA_MAGMA\pulseq_QA_fmri_sli27_rep200_run4

TA: 6:40 min Coil Selection: Manual Voxel Size: 3.4×3.4×4.0 mm³ Acc:: None Rel. SNR: 1.00**Properties**

Start measurement without further preparation	On
Wait for User to Start	Off
Start measurements	Single Measurement
Prio Recon	Off
Auto Open Inline Display	Off
Auto Close Inline Display	Off
Load Images to MR View&GO	On
Auto Store Images	On
Disable auto transfer to PACS	Off
Load Images to Stamp Segments	Off
Load Images to Graphic Segments	Off
Graphic segment	Default
Inline Movie	Off

Routine

Slice Group	1
Slices	27
Distance Factor	25 %
Position	R1.1 P3.3 F1.7 mm
Orientation	Transversal
Phase Encoding Dir.	A >> P
FOV Read	220 mm
FOV Phase	100.0 %
Slice Thickness	4.0 mm
TR	100.000 ms
TE	10.00 ms
AutoAlign	---
Coil Elements	HE1-4;NE1,2

Contrast - Common

TR	100.000 ms
TE	10.00 ms
Fat-Water Contrast	Standard
Contrasts	1

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	200
Pause after Meas.	0.0 s

Resolution - Common

FOV Read	220 mm
FOV Phase	100.0 %
Slice Thickness	4.0 mm
Base Resolution	64
Phase Resolution	100 %

Resolution - Acceleration

Acceleration Mode	None
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Resolution - Filter

Raw Filter	Off
Elliptical Filter	Off
Distortion Correction	Off
Normalize	Off
Image Filter	Off

Geometry - Common

Slice Group	1
Slices	27
Distance Factor	25 %
Position	R1.1 P3.3 F1.7 mm
Orientation	Transversal
Phase Encoding Dir.	A >> P
FOV Read	220 mm
FOV Phase	100.0 %
Slice Thickness	4.0 mm
TR	100.000 ms
Series	Ascending

Geometry - AutoAlign

Slice Group	1
Position	R1.1 P3.3 F1.7 mm
Orientation	Transversal
Phase Encoding Dir.	A >> P
AutoAlign	---
Initial Position	R1.1 P3.3 F1.7
R	1.1 mm
P	3.3 mm
F	1.7 mm
Initial Orientation	Transversal
Initial Rotation	0.00 deg

Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table Position	2 mm
Table Position	F
Inline Composing	Off

System - Miscellaneous

Coil Selection	Manual
Radial Sorting	Off
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combination	Sum of Squares
Matrix Optimization	Off

System - Adjustments

Adjustment Strategy	Standard
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System - Adjustments

B0 Shim	Standard
B1 Shim	TrueForm
CoilShim	Off
Adjustment Tolerance	Auto
Adjust with Body Coil	Off
Confirm Frequency	Never
Assume Silicone	Off

System - Adjust Volume

Position	R1.1 P3.3 F1.7 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	220 mm
R >> L	220 mm
F >> H	134 mm
Reset	Off

System - pTx

B1 Shim	TrueForm
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System - Tx/Rx

Frequency 1H	123.205994 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Correction Factor	1.00
Image Scaling	0.700

Physio - Signal

1st Signal/Mode	None
TR	100.000 ms

Inline - Open Recon

Algorithm	None
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Sequence - Part 1

Sequence Name	QA_epi
Dimension	2D
Gradient Mode	Fast

Sequence - Part 2**Sequence - Nuclei**

TX/RX Nucleus	1H
TX/RX Delta Frequency	0 Hz
TX Nucleus	None
TX Delta Frequency	0 Hz
Coil Elements	HE1-4;NE1,2

Sequence - Special

Pulseq file	qingping/QA_epi.seq
Execution mode	pulseq/run
Data handling	ICE STD
Timing and Flip Angles	adapt FA
FOV positioning	enabled

Sequence - Special

Orientation mapping	XYZ in TRA
libBalance / Grad health	disabled
Number of runs	1
Delay after run(s)	0.00 ms
ADC length per segment	0
Use SET for SLC	Off
Delay before start	0 ms
Gradient scaling[1]	100.00 %
Gradient scaling[2]	100.00 %
Gradient scaling[3]	100.00 %
MoCo Level	off

Sequence - Assistant

SAR Assistant	Off
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