

SIEMENS MAGNETOM Investigational_Device_7T syngo MR B17

\\USER\Feinberglab\Suhyung\GRASE_IV_TSNR\BP_grase_clean_IV_TE41_PF6/8_Res08_SH

TA: 0:00 PAT: Off Voxel size: 0.8x0.8x1.0 mm Rel. SNR: 1.00 USER: BP_grase_clean_IV_SH

Properties

Prio Recon	Off
Before measurement	
After measurement	
Load to viewer	On
Inline movie	Off
Auto store images	On
Load to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	single

Routine

Slab group 1	
Slabs	1
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0 deg
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	8
FoV read	108 mm
FoV phase	25.0 %
Slice thickness	1 mm
TR	3000 ms
TE	41.14 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	B4;M2,3;T1

Contrast

Magn. preparation	None
Flip angle	180 deg
Fat suppr.	Fat sat.
Fat sat. mode	Strong
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	48
Pause after meas. 1	0 s
Pause after meas. 2	0 s
Pause after meas. 3	0 s
Pause after meas. 4	0 s
Pause after meas. 5	0 s
Pause after meas. 6	0 s
Pause after meas. 7	0 s
Pause after meas. 8	0 s
Pause after meas. 9	0 s
Pause after meas. 10	0 s
Pause after meas. 11	0 s
Pause after meas. 12	0 s
Pause after meas. 13	0 s
Pause after meas. 14	0 s
Pause after meas. 15	0 s
Pause after meas. 16	0 s
Pause after meas. 17	0 s
Pause after meas. 18	0 s
Pause after meas. 19	0 s

Pause after meas. 20	0 s
Pause after meas. 21	0 s
Pause after meas. 22	0 s
Pause after meas. 23	0 s
Pause after meas. 24	0 s
Pause after meas. 25	0 s
Pause after meas. 26	0 s
Pause after meas. 27	0 s
Pause after meas. 28	0 s
Pause after meas. 29	0 s
Pause after meas. 30	0 s
Pause after meas. 31	0 s
Pause after meas. 32	0 s
Pause after meas. 33	0 s
Pause after meas. 34	0 s
Pause after meas. 35	0 s
Pause after meas. 36	0 s
Pause after meas. 37	0 s
Pause after meas. 38	0 s
Pause after meas. 39	0 s
Pause after meas. 40	0 s
Pause after meas. 41	0 s
Pause after meas. 42	0 s
Pause after meas. 43	0 s
Pause after meas. 44	0 s
Pause after meas. 45	0 s
Pause after meas. 46	0 s
Pause after meas. 47	0 s
Multiple series	Off

Resolution

Base resolution	128
Phase resolution	100 %
Slice resolution	100 %
Slice partial Fourier	6/8
Interpolation	Off
PAT mode	None
Prescan Normalize	Off
Raw filter	Off

Geometry

Series	Interleaved
Sat. region 1	
Thickness	28 mm
Position	Isocenter
Orientation	Coronal
Special sat.	None
Table position	H
Table position	0 mm
Inline Composing	Off

System

T1	On
M2	On
B4	On
M3	On
V32	Off
Positioning mode	REF
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Save uncombined	Off

SIEMENS MAGNETOM Investigational_Device_7T syngo MR B17

Coil Combine Mode	Adaptive Combine
AutoAlign	---
Auto Coil Select	Default
<hr/>	
Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
? Ref. amplitude 1H	0.000 V
Adjustment Tolerance	Auto
Adjust volume	
Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
R >> L	108 mm
A >> P	27 mm
F >> H	8 mm

Physio

1st Signal/Mode	None
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Composing

Sequence

Introduction	Off
Dimension	3D
Reordering	Centric
Contrasts	1
Bandwidth	1148 Hz/Px
<hr/>	
Turbo factor	6
EPI factor	128
RF pulse type	Normal
Gradient mode	Fast
<hr/>	
refocussing type	sinc 2560
flip angle excit	90
phase encoding	ON
Maxwell compensation	Off
ICE program	single
prepsans	0
excite duration	0
refoc duration	0
excite BWTP	0
refoc BWTP	0
Opposite Polarity Crusher	Off
pre-crusher	0
post-crusher1	0
post-crusher2	0
post-crusher3	0
post-crusher4	0

SIEMENS MAGNETOM Investigational_Device_7T syngo MR B17

\\USER\Feinberglab\Suhyung\GRASE_IV_TSNR\BP_grase_clean_IV_TE41_PF6/8_Res08_VFA_SH

TA: 0:00 PAT: Off Voxel size: 0.8x0.8x1.0 mm Rel. SNR: 1.00 USER: BP_grase_clean_IV_SH

Properties

Prio Recon	Off
Before measurement	
After measurement	
Load to viewer	On
Inline movie	Off
Auto store images	On
Load to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	single

Routine

Slab group 1	
Slabs	1
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0 deg
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	8
FoV read	108 mm
FoV phase	25.0 %
Slice thickness	1 mm
TR	3000 ms
TE	41.14 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	B4;M2,3;T1

Contrast

Magn. preparation	None
Flip angle	180 deg
Fat suppr.	Fat sat.
Fat sat. mode	Strong
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	48
Pause after meas. 1	0 s
Pause after meas. 2	0 s
Pause after meas. 3	0 s
Pause after meas. 4	0 s
Pause after meas. 5	0 s
Pause after meas. 6	0 s
Pause after meas. 7	0 s
Pause after meas. 8	0 s
Pause after meas. 9	0 s
Pause after meas. 10	0 s
Pause after meas. 11	0 s
Pause after meas. 12	0 s
Pause after meas. 13	0 s
Pause after meas. 14	0 s
Pause after meas. 15	0 s
Pause after meas. 16	0 s
Pause after meas. 17	0 s
Pause after meas. 18	0 s
Pause after meas. 19	0 s

Pause after meas. 20	0 s
Pause after meas. 21	0 s
Pause after meas. 22	0 s
Pause after meas. 23	0 s
Pause after meas. 24	0 s
Pause after meas. 25	0 s
Pause after meas. 26	0 s
Pause after meas. 27	0 s
Pause after meas. 28	0 s
Pause after meas. 29	0 s
Pause after meas. 30	0 s
Pause after meas. 31	0 s
Pause after meas. 32	0 s
Pause after meas. 33	0 s
Pause after meas. 34	0 s
Pause after meas. 35	0 s
Pause after meas. 36	0 s
Pause after meas. 37	0 s
Pause after meas. 38	0 s
Pause after meas. 39	0 s
Pause after meas. 40	0 s
Pause after meas. 41	0 s
Pause after meas. 42	0 s
Pause after meas. 43	0 s
Pause after meas. 44	0 s
Pause after meas. 45	0 s
Pause after meas. 46	0 s
Pause after meas. 47	0 s
Multiple series	Off

Resolution

Base resolution	128
Phase resolution	100 %
Slice resolution	100 %
Slice partial Fourier	6/8
Interpolation	Off
PAT mode	None
Prescan Normalize	Off
Raw filter	Off

Geometry

Series	Interleaved
Sat. region 1	
Thickness	28 mm
Position	Isocenter
Orientation	Coronal
Special sat.	None
Table position	H
Table position	0 mm
Inline Composing	Off

System

T1	On
M2	On
B4	On
M3	On
V32	Off
Positioning mode	REF
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Save uncombined	Off

SIEMENS MAGNETOM Investigational_Device_7T syngo MR B17

Coil Combine Mode	Adaptive Combine
AutoAlign	---
Auto Coil Select	Default
<hr/>	
Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
? Ref. amplitude 1H	0.000 V
Adjustment Tolerance	Auto
Adjust volume	
Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
R >> L	108 mm
A >> P	27 mm
F >> H	8 mm

Physio

1st Signal/Mode	None
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Composing

Sequence

Introduction	Off
Dimension	3D
Reordering	Centric
Contrasts	1
Bandwidth	1148 Hz/Px
<hr/>	
Turbo factor	6
EPI factor	128
RF pulse type	Normal
Gradient mode	Fast
<hr/>	
refocussing type	variable sinc
flip angle excit	90
phase encoding	ON
Maxwell compensation	Off
ICE program	single
prepsans	0
excite duration	0
refoc duration	0
excite BWTP	0
refoc BWTP	0
Opposite Polarity Crusher	Off
pre-crusher	0
post-crusher1	0
post-crusher2	0
post-crusher3	0
post-crusher4	0

SIEMENS MAGNETOM Investigational_Device_7T syngo MR B17

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TA: 0:00 PAT: Off Voxel size: 0.8x0.8x1.0 mm Rel. SNR: 1.00 USER: BP_grase_clean_IV_SH

Properties

Prio Recon	Off
Before measurement	
After measurement	
Load to viewer	On
Inline movie	Off
Auto store images	On
Load to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	single

Routine

Slab group 1	
Slabs	1
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0 deg
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	28
FoV read	108 mm
FoV phase	25.0 %
Slice thickness	1 mm
TR	3000 ms
TE	41.14 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	B4;M2,3;T1

Contrast

Magn. preparation	None
Flip angle	180 deg
Fat suppr.	Fat sat.
Fat sat. mode	Strong
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	48
Pause after meas. 1	0 s
Pause after meas. 2	0 s
Pause after meas. 3	0 s
Pause after meas. 4	0 s
Pause after meas. 5	0 s
Pause after meas. 6	0 s
Pause after meas. 7	0 s
Pause after meas. 8	0 s
Pause after meas. 9	0 s
Pause after meas. 10	0 s
Pause after meas. 11	0 s
Pause after meas. 12	0 s
Pause after meas. 13	0 s
Pause after meas. 14	0 s
Pause after meas. 15	0 s
Pause after meas. 16	0 s
Pause after meas. 17	0 s
Pause after meas. 18	0 s
Pause after meas. 19	0 s

Pause after meas. 20	0 s
Pause after meas. 21	0 s
Pause after meas. 22	0 s
Pause after meas. 23	0 s
Pause after meas. 24	0 s
Pause after meas. 25	0 s
Pause after meas. 26	0 s
Pause after meas. 27	0 s
Pause after meas. 28	0 s
Pause after meas. 29	0 s
Pause after meas. 30	0 s
Pause after meas. 31	0 s
Pause after meas. 32	0 s
Pause after meas. 33	0 s
Pause after meas. 34	0 s
Pause after meas. 35	0 s
Pause after meas. 36	0 s
Pause after meas. 37	0 s
Pause after meas. 38	0 s
Pause after meas. 39	0 s
Pause after meas. 40	0 s
Pause after meas. 41	0 s
Pause after meas. 42	0 s
Pause after meas. 43	0 s
Pause after meas. 44	0 s
Pause after meas. 45	0 s
Pause after meas. 46	0 s
Pause after meas. 47	0 s
Multiple series	Off

Resolution

Base resolution	128
Phase resolution	100 %
Slice resolution	100 %
Slice partial Fourier	5/8
Interpolation	Off
PAT mode	None
Prescan Normalize	Off
Raw filter	Off

Geometry

Series	Interleaved
Sat. region 1	
Thickness	28 mm
Position	Isocenter
Orientation	Coronal
Special sat.	None
Table position	H
Table position	0 mm
Inline Composing	Off

System

T1	On
M2	On
B4	On
M3	On
V32	Off
Positioning mode	REF
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Save uncombined	Off

SIEMENS MAGNETOM Investigational_Device_7T syngo MR B17

Coil Combine Mode	Adaptive Combine
AutoAlign	---
Auto Coil Select	Default
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Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
? Ref. amplitude 1H	0.000 V
Adjustment Tolerance	Auto
Adjust volume	
Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
R >> L	108 mm
A >> P	27 mm
F >> H	28 mm

Physio

1st Signal/Mode	None
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Composing

Sequence

Introduction	Off
Dimension	3D
Reordering	Centric
Contrasts	1
Bandwidth	1148 Hz/Px
<hr/>	
Turbo factor	18
EPI factor	128
RF pulse type	Normal
Gradient mode	Fast
<hr/>	
refocussing type	variable sinc > 20
flip angle excit	90
phase encoding	ON
Maxwell compensation	Off
ICE program	single
prepsans	0
excite duration	0
refoc duration	0
excite BWTP	0
refoc BWTP	0
Opposite Polarity Crusher	Off
pre-crusher	0
post-crusher1	0
post-crusher2	0
post-crusher3	0
post-crusher4	0

SIEMENS MAGNETOM Investigational_Device_7T syngo MR B17

\\USER\Feinberglab\Suhying\GRASE_IV_TSNR\pgrs3d_ey_20180816_p8mm

TA: 2:24 PAT: Off Voxel size: 0.8x0.8x0.8 mm Rel. SNR: 1.00 USER: pgrs3d_ey_20180816

Properties

Prio Recon	Off
Before measurement	
After measurement	
Load to viewer	On
Inline movie	Off
Auto store images	On
Load to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	single

Routine

Slab group 1	
Slabs	1
Dist. factor	0 %
Position	L2.0 P85.7 H0.0
Orientation	Transversal
Phase enc. dir.	A >> P
Rotation	0.00 deg
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	8
FoV read	108 mm
FoV phase	25.0 %
Slice thickness	0.80 mm
TR	3000 ms
TE	39.32 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	B1-8

Contrast

Flip angle 1	90 deg
Flip angle 2	180 deg
Fat suppr.	Fat sat.
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	48
Pause after meas. 1	0.0 s
Pause after meas. 2	0.0 s
Pause after meas. 3	0.0 s
Pause after meas. 4	0.0 s
Pause after meas. 5	0.0 s
Pause after meas. 6	0.0 s
Pause after meas. 7	0.0 s
Pause after meas. 8	0.0 s
Pause after meas. 9	0.0 s
Pause after meas. 10	0.0 s
Pause after meas. 11	0.0 s
Pause after meas. 12	0.0 s
Pause after meas. 13	0.0 s
Pause after meas. 14	0.0 s
Pause after meas. 15	0.0 s
Pause after meas. 16	0.0 s
Pause after meas. 17	0.0 s
Pause after meas. 18	0.0 s
Pause after meas. 19	0.0 s
Pause after meas. 20	0.0 s

Pause after meas. 21	0.0 s
Pause after meas. 22	0.0 s
Pause after meas. 23	0.0 s
Pause after meas. 24	0.0 s
Pause after meas. 25	0.0 s
Pause after meas. 26	0.0 s
Pause after meas. 27	0.0 s
Pause after meas. 28	0.0 s
Pause after meas. 29	0.0 s
Pause after meas. 30	0.0 s
Pause after meas. 31	0.0 s
Pause after meas. 32	0.0 s
Pause after meas. 33	0.0 s
Pause after meas. 34	0.0 s
Pause after meas. 35	0.0 s
Pause after meas. 36	0.0 s
Pause after meas. 37	0.0 s
Pause after meas. 38	0.0 s
Pause after meas. 39	0.0 s
Pause after meas. 40	0.0 s
Pause after meas. 41	0.0 s
Pause after meas. 42	0.0 s
Pause after meas. 43	0.0 s
Pause after meas. 44	0.0 s
Pause after meas. 45	0.0 s
Pause after meas. 46	0.0 s
Pause after meas. 47	0.0 s
Multiple series	Off

Resolution

Base resolution	128
Phase resolution	100 %
Slice resolution	100 %
Slice partial Fourier	6/8
Interpolation	Off
PAT mode	None
Raw filter	Off

Geometry

Series	Ascending
Sat. region 1	
Thickness	28 mm
Position	L2.0 P85.7 H0.0
Orientation	Coronal
Special sat.	None
Table position	H
Table position	0 mm
Inline Composing	Off

System

B1	On
B2	On
B3	On
B4	On
B5	On
B6	On
B7	On
B8	On
Positioning mode	FIX
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H

SIEMENS MAGNETOM Investigational_Device_7T syngo MR B17

Save uncombined	Off
Coil Combine Mode	Adaptive Combine
AutoAlign	---
Auto Coil Select	Default
<hr/>	
Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
! Ref. amplitude 1H	100.000 V
Adjustment Tolerance	Auto
Adjust volume	
Position	L2.0 P85.7 H0.0
Orientation	Transversal
Rotation	0.00 deg
R >> L	108 mm
A >> P	27 mm
F >> H	7 mm

Physio

1st Signal/Mode	None
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BOLD

Motion correction	Off
Spatial filter	Off

Sequence

Introduction	Off
Dimension	3D
Reordering	Centric
Contrasts	1
Bandwidth	1148 Hz/Px
Echo spacing	1.02 ms
<hr/>	
Slice turbo factor	6
EPI factor	32
RF pulse type	Normal
Gradient mode	Fast
<hr/>	
Adjust flipangles	Off
FLIP ANGLES[1]	180 deg
FLIP ANGLES[2]	180 deg
FLIP ANGLES[3]	180 deg
FLIP ANGLES[4]	180 deg
FLIP ANGLES[5]	180 deg
FLIP ANGLES[6]	180 deg
Crusher Factor	7.00
Spoiler Factor	1.00
RF02 BWT Factor	1.00
RF02 time	2560 ms
RF Scaling[1]	1.00
Phase Encoding PE	On
Phase Encoding 3D	On
Measurement Number	1023
Inversion Flag	Off
FFT Scale Factor	0.10
ACROSSSEGMENTS	Off
PRIMARYMODE	On
AUTOCORR	Off
CROSSCORR	Off
FILTERED	On
FatSat FlipAngle	110 deg

Table of contents

\\USER

Feinberglab

Suhung

GRASE_IV_TSNR

resolution: iso-0.8mm3

BP_grase_clean_IV_TE41_PF6/8_Res08_SH

BP_grase_clean_IV_TE41_PF6/8_Res08_VFA_SH

BP_grase_clean_IV_TE41_PF6/8_Res08_VFA_SH

BP_grase_clean_IV_CS_TE41_PF6/8_Res08_SH

BP_grase_clean_IV_CS_TE35_PF6/8_Res08_SH

BP_grase_clean_IV_CS_TE38_PF6/8_Res08_fov48_SH

pgrs3d_ey_20180816_p8mm