\\NSI_MR_Research\final_studies\3D_EPI_Spielplatz\Dec_2020\ma4a_BINO11_slab

TA: 1:01 PM: REF Voxel size: 0.8×0.8×0.8 mmPAT: 3 Rel. SNR: 1.00 : 0c0b7b7

Properties

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	Off
Wait for user to start	Off
Start measurements	Single measurement

Routine

Slab group	1
Slabs	1
Position	R0.1 A5.0 H79.0 mm
Orientation	T > C-6.1 > S-0.7
Phase enc. dir.	A >> P
AutoAlign	---
Slab Scale	-10 %
Slices per slab	26
FoV read	177 mm
FoV phase	100.0 %
Slice thickness	0.82 mm
TR 1	80.6 ms
TR 2	4761 ms
TE 1	28.50 ms
Averages	1
Multi-echo Shots	1
Filter	Distortion Corr.(3D), Prescan Normalize
Coil elements	HC2,4,6,7;NC2

Contrast - Common

TR 1	80.6 ms
TR 2	4761 ms
TE 1	28.50 ms
Multi-echo spacing	76.51 ms
Magn. preparation	Non-sel. HSN IR
TI 1	1607.8 ms
TI 2	3703.4 ms
Flip angle	30 deg
Fat suppr.	None
Magn. Prep. Shots	1

make this 60

Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	10
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

Resolution - Common

FoV read	177 mm
FoV phase	100.0 %
Slice thickness	0.82 mm
Base resolution	216
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	6/8
Slice partial Fourier	Off
Interpolation	Off

Resolution - iPAT

PAT mode	CAIPIRINHA
Acc. factor PE	3
Ref. lines PE	45
Acc. factor 3D	1
Ref. lines 3D	24
CAIPI 3D Shift	0
Reference Scan Mode	GRE/separate
CAIPIRINHA mode	Free

Resolution - Filter Image

Image Filter	Off
Distortion Corr.	On
Mode	3D
Unfiltered images	Off
Prescan Normalize	On
Unfiltered images	Off
Normalize	Off
B1 filter	Off

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off

Geometry - Common

Slab group	1
Slabs	1
Position	R0.1 A5.0 H79.0 mm
Orientation	T > C-6.1 > S-0.7
Phase enc. dir.	A >> P
Slab Scale	-10 %
Slices per slab	26
FoV read	177 mm
FoV phase	100.0 %
Slice thickness	0.82 mm
TR 1	80.6 ms
TR 2	4761 ms
Multi-slice mode	Interleaved
Series	Ascending
Multi-echo Shots	1

Geometry - AutoAlign

Slab group	1
Position	R0.1 A5.0 H79.0 mm
Orientation	T > C-6.1 > S-0.7
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	R0.1 A5.0 H79.0
R	0.1 mm
A	5.0 mm

If you want shorter TR,
make this up to 1102,
(only adjustable, from scratch protocol)
this will lower tSNR.

Geometry - AutoAlign

H	79.0 mm
Initial Rotation	1.40 deg
Initial Orientation	T > C
T > C	-6.1
> S	-0.7

Geometry - Saturation

Saturation mode	Standard
Fat suppr.	None

Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	Off

System - Miscellaneous

Positioning mode	REF
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Default

System - Adjustments

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

! Position	L0.0 A0.8 H76.0 mm
! Orientation	T > C-5.3
! Rotation	0.00 deg
! A >> P	150 mm
! R >> L	150 mm
! F >> H	24 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Slab-sel.

System - Tx/Rx

Frequency 1H	123.247819 MHz
Correction factor	1
Gain	Low
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V 250V

Sequence - Part 1

Introduction	On
Dimension	3D

Sequence - Part 1

Reordering	Linear
Asymmetric echo	Off
Contrasts	1
Multi-slice mode	Interleaved
Echo spacing	1.4 ms
Bandwidth	772 Hz/Px

Sequence - Part 2

EPI factor	54
Segmentation	1
RF pulse type	Normal
Gradient mode	Performance
Excitation	Slab-sel.
RF spoiling	On
Turbo factor	26

Sequence - Special

PATRef FA	3 deg
RF duration	1100 us
RF BWT product	8
Ernst T1	1200 ms
PATRef prep. shots	10
Volume dummy shots	0
Dummy Measurements	0
PATRef averages	2
ETL per RTEB	1
Invert PE	Off
Min. TE if PF	On
Echo Time Shift	On
Invert 3D	Off
Invert RO	Off
Alternate RO	Off
Disable PF reco	Off
Ramp Sampling	On
Disable PF reco	Off
Save sampling	Off
PE VComp	Off
Water Exc.	Binomial-11
External PC	per Series
FIDNavs	-none-
EPI rise time factor	1.10
Mosaic DICOMs	On
Modify IcePAT	Off
HSN RF power scale	3.00
Inversion Delay	550 ms
Relaxation Delay	0 ms
Var. FA /MAGEC	4

Sequence - Assistant

Mode	Off