

## MSK-THR HIP NEW

Protocol: adult\_spine\_Ultrafast 3 part w spine

## IMAGING PARAMETERS

Imaging Mode 2D  
Pulse Sequence Gradient Echo  
Imaging Options Seq, Fast

## SCAN RANGE

FOV 48.0  
Slice Thickness 7.00  
Slice Spacing 0.0  
Overlap Locations 0  
Number of Slices 15

## ACQ TIMING

Freq 256  
Phase 128  
Freq DIR Unswap  
NEX 1.00  
Phase FOV 1.00  
Auto Shim Auto  
Phase Correction No  
RF Drive Mode Single  
Excitation Mode Selective

## USER CVS

User CV20 1.00  
User CV Mask2 0

## MULTI-PHASE

Seperate Series 0  
Mask Phase 0  
Mask Pause 0  
Preserve 0

## DIFFUSION

Recon All Images On  
# Synthetic b-values 1  
Synthetic b-value 1000.0;

## CONTRAST

Contrast Yes/No No

## SCAN TIMING

Number of Echoes 1

## IMAGE ENHANCE

Filter Choice None

## GATING/TRIGGER

Pause After Navigator Prescan 0

## FMRI

PSD Trigger Internal  
View Order Bottom/Up  
# of Repetitions REST 0  
# of Repetitions ACTIVE 0

## SAT

Tag Type None

## TRICKS

Pause On/Off On  
Auto Subtract 0  
Auto SCIC Off

TOP LOC - TOP LOC

TOP LOC - TOP LOC

## MSK-THR HIP NEW

Protocol: adult\_spine\_Ultrafast 3 part w spine

**IMAGING PARAMETERS**

Imaging Mode 2D  
Pulse Sequence Gradient Echo  
Imaging Options Seq, Fast

**SCAN RANGE**

FOV 48.0  
Slice Thickness 7.00  
Slice Spacing 5.0  
Overlap Locations 0  
Number of Slices 17

**ACQ TIMING**

Freq 256  
Phase 128  
Freq DIR Unswap  
NEX 1.00  
Phase FOV 1.00  
Auto Shim Auto  
Phase Correction No  
RF Drive Mode Single  
Excitation Mode Selective

**USER CVS**

User CV20 1.00  
User CV Mask2 0

**MULTI-PHASE**

Seperate Series 0  
Mask Phase 0  
Mask Pause 0  
Preserve 0

**DIFFUSION**

Recon All Images On  
Multi b-values 1000.0;  
Multi NEX Values 1.0;  
# Synthetic b-values 1  
Synthetic b-value 1000.0;

**CONTRAST**

Contrast Yes/No No

**SCAN TIMING**

Number of Echoes 1

**IMAGE ENHANCE**

Filter Choice None

**GATING/TRIGGER**

Pause After Navigator Prescan 0

**FMRI**

PSD Trigger Internal  
View Order Bottom/Up  
# of Repetitions REST 0  
# of Repetitions ACTIVE 0

**SAT**

Tag Type None

**TRICKS**

Pause On/Off On  
Auto Subtract 0  
Auto SCIC Off

TOP LOC - TOP LOC

TOP LOC - TOP LOC

## MSK-THR HIP NEW

Protocol: adult\_spine\_Ultrafast 3 part w spine

**IMAGING PARAMETERS**

Imaging Mode 2D  
Pulse Sequence Gradient Echo  
Imaging Options Seq, Fast

**SCAN RANGE**

FOV 48.0  
Slice Thickness 10.00  
Slice Spacing 0.0  
Overlap Locations 0  
Number of Slices 19

**ACQ TIMING**

Freq 256  
Phase 128  
Freq DIR Unswap  
NEX 1.00  
Phase FOV 1.00  
Auto Shim Auto  
Phase Correction No  
RF Drive Mode Single  
Excitation Mode Selective

**USER CVS**

User CV20 1.00  
User CV Mask2 0

**MULTI-PHASE**

Seperate Series 0  
Mask Phase 0  
Mask Pause 0  
Preserve 0

**DIFFUSION**

Recon All Images On  
# Synthetic b-values 1  
Synthetic b-value 1000.0;

**CONTRAST**

Contrast Yes/No No

**SCAN TIMING**

Number of Echoes 1

**IMAGE ENHANCE**

Filter Choice None

**GATING/TRIGGER**

Pause After Navigator Prescan 0

**FMRI**

PSD Trigger Internal  
View Order Bottom/Up  
# of Repetitions REST 0  
# of Repetitions ACTIVE 0

**SAT**

Tag Type None

**TRICKS**

Pause On/Off On  
Auto Subtract 0  
Auto SCIC Off

BOT LOC - BOT LOC

BOT LOC - BOT LOC

## MSK-THR HIP NEW

Protocol: adult\_spine\_Ultrafast 3 part w spine

**IMAGING PARAMETERS**

Imaging Mode	2D
Pulse Sequence	FSE-XL
Imaging Options	EDR, TRF, Fast, ZIP512, ARC
Phase	2.00

**SCAN RANGE**

FOV	22.0
Slice Thickness	3.00
Slice Spacing	0.3
Overlap Locations	0
Number of Slices	17

**ACQ TIMING**

Freq	384
Phase	288
Freq DIR	A/P
Fat Shift DIR	Normal (P)
NEX	1.50
# of Acq. Before Pause	0
Phase FOV	1.00
Auto Shim	Auto
Phase Correction	No
RF Drive Mode	Single
Excitation Mode	Selective

**FMRI**

PSD Trigger	Internal
View Order	Bottom/Up
# of Repetitions REST	0
# of Repetitions ACTIVE	0

**SAT**

SAT Location	A
SAT Location	S
SAT Location	I
Tag Type	None

**TRICKS**

Pause On/Off	On
Auto Subtract	0
Auto SCIC	3

**CONTRAST**

Contrast Yes/No	No
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**SCAN TIMING**

Flip Angle	160
TE	Min Full
Number of Echoes	1
TR	699.0
Echo Train Length	4
Receiver Bandwidth	25.00

**IMAGE ENHANCE**

Filter Choice	None
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**USER CVS**

User CV12	1.00
User CV18	1.00
TR Min	300.0
TR Max	750.0
User CV30	1.00
User CV39	1.00
User CV Mask2	256

**MULTI-PHASE**

Seperate Series	0
Mask Phase	0
Mask Pause	0
Preserve	0

**DIFFUSION**

Recon All Images	On
Multi b-values	1000.0;
Multi NEX Values	1.0;
# Synthetic b-values	1
Synthetic b-value	1000.0;

**TRACKER**

Tracker Length	200.0
Tracker Thickness	20.0

Sag T1 TOP - Sag T1 TOP

Sag T1 TOP - Sag T1 TOP

## MSK-THR HIP NEW

Protocol: adult\_spine\_Ultrafast 3 part w spine

SAG T2 TOP - SAG T2 TOP

SAG T2 TOP - SAG T2 TOP

**IMAGING PARAMETERS**

Imaging Mode	2D
Pulse Sequence	FSE-XL
Imaging Options	FC, EDR, TRF, Fast, ZIP512, FR, ARC
Phase	2.00

**SCAN RANGE**

FOV	22.0
Slice Thickness	3.00
Slice Spacing	0.3
Overlap Locations	0
Number of Slices	17

**ACQ TIMING**

Freq	416
Phase	288
Freq DIR	A/P
Fat Shift DIR	Normal (P)
NEX	2.00
Phase FOV	1.00
Auto Shim	Auto
Phase Correction	Yes
Flow Direction Compensation	Freq
RF Drive Mode	Single
Excitation Mode	Selective

**FMRI**

PSD Trigger	Internal
View Order	Bottom/Up
# of Repetitions REST	0
# of Repetitions ACTIVE	0

**SAT**

SAT Location	A
SAT Location	S
SAT Location	I
Tag Type	None

**TRICKS**

Pause On/Off	On
Auto Subtract	0
Auto SCIC	3

**SCAN TIMING**

Flip Angle	160
TE	120.0
Number of Echoes	1
TR	5956.0
Echo Train Length	24
Receiver Bandwidth	25.00

**IMAGE ENHANCE**

Filter Choice	None
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**USER CVS**

User CV7	1.00
User CV15	0
User CV18	1.00
TR Min	2500.0
TR Max	11000.0
User CV30	1.00
User CV39	1.00
User CV Mask2	256

**MULTI-PHASE**

Seperate Series	0
Mask Phase	0
Mask Pause	0
Preserve	0

**DIFFUSION**

Recon All Images	On
Multi b-values	1000.0;
Multi NEX Values	1.0;
# Synthetic b-values	1
Synthetic b-value	1000.0;

**CONTRAST**

Contrast Yes/No	No
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## MSK-THR HIP NEW

Protocol: adult\_spine\_Ultrafast 3 part w spine

**IMAGING PARAMETERS**

Imaging Mode	2D
Pulse Sequence	PROPELLER
Imaging Options	EDR, TRF, Fast, ARC
Phase	2.00

**SCAN RANGE**

FOV	22.0
Slice Thickness	3.00
Slice Spacing	0.3
Overlap Locations	0
Number of Slices	17

**ACQ TIMING**

Freq	384
Freq DIR	A/P
Fat Shift DIR	Normal (P)
NEX	1.50
# of Acq. Before Pause	0
Auto Shim	Auto
Phase Correction	No
RF Drive Mode	Single
Excitation Mode	Selective

**FMRI**

PSD Trigger	Internal
View Order	Bottom/Up
# of Repetitions REST	0
# of Repetitions ACTIVE	0

**SAT**

SAT Location	A
SAT Location	S
SAT Location	I
Tag Type	None

**TRICKS**

Pause On/Off	On
Auto Subtract	0
Auto SCIC	3

**CONTRAST**

Contrast Yes/No	No
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**SCAN TIMING**

Flip Angle	160
Number of Echoes	1
TR	616.0
Echo Train Length	4
Receiver Bandwidth	35.71

**IMAGE ENHANCE**

Filter Choice	None
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**USER CVS**

User CV5	1.00
User CV12	1.00
TR Min	300.0
TR Max	750.0
User CV30	1.00
User CV39	1.00
User CV Mask2	256

**MULTI-PHASE**

Seperate Series	0
Mask Phase	0
Mask Pause	0
Preserve	0

**DIFFUSION**

Recon All Images	On
Multi b-values	1000.0;
Multi NEX Values	1.0;
# Synthetic b-values	1
Synthetic b-value	1000.0;

**TRACKER**

Tracker Length	200.0
Tracker Thickness	20.0

Sag T1 TOP Prop - Sag T1 TOP Prop

Sag T1 TOP Prop - Sag T1 TOP Prop

## MSK-THR HIP NEW

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## IMAGING PARAMETERS

Imaging Mode	2D
Pulse Sequence	FSE-XL
Imaging Options	FC, EDR, TRF, Fast, ZIP512, FR, ARC
Phase	2.00

## SCAN RANGE

FOV	22.0
Slice Thickness	3.00
Slice Spacing	0.3
Overlap Locations	0
Number of Slices	17

## ACQ TIMING

Freq	416
Phase	256
Freq DIR	A/P
Fat Shift DIR	Normal (P)
NEX	1.00
Phase FOV	1.00
Auto Shim	Auto
Phase Correction	Yes
Flow Direction Compensation	Freq
RF Drive Mode	Single
Excitation Mode	Selective

## FMRI

PSD Trigger	Internal
View Order	Bottom/Up
# of Repetitions REST	0
# of Repetitions ACTIVE	0

## SAT

SAT Location	A
SAT Location	S
SAT Location	I
Tag Type	None

## TRICKS

Pause On/Off	On
Auto Subtract	0
Auto SCIC	3

## SCAN TIMING

Flip Angle	160
TE	120.0
Number of Echoes	1
TR	4497.0
Echo Train Length	24
Receiver Bandwidth	50.00

## IMAGE ENHANCE

Filter Choice	None
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## USER CVS

User CV12	1.00
User CV15	0
User CV18	1.00
TR Min	2500.0
TR Max	11000.0
User CV30	1.00
User CV39	1.00
User CV Mask2	256

## MULTI-PHASE

Seperate Series	0
Mask Phase	0
Mask Pause	0
Preserve	0

## DIFFUSION

Recon All Images	On
Multi b-values	1000.0;
Multi NEX Values	1.0;
# Synthetic b-values	1
Synthetic b-value	1000.0;

## CONTRAST

Contrast Yes/No	No
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SAG T2 TOP - SAG T2 TOP

SAG T2 TOP - SAG T2 TOP

MSK-THR HIP NEW

Protocol: adult\_spine\_Ultrafast 3 part w spine

Sag T1 Fast TOP - Sag T1 Fast TOP

IMAGING PARAMETERS	
Imaging Mode	2D
Pulse Sequence	FSE-XL
Imaging Options	EDR, TRF, Fast, ZIP512, ARC
Phase	2.00
SCAN RANGE	
FOV	22.0
Slice Thickness	3.00
Slice Spacing	0.3
Overlap Locations	0
Number of Slices	17
ACQ TIMING	
Freq	384
Phase	224
Freq DIR	A/P
Fat Shift DIR	Normal (P)
NEX	1.00
# of Acq. Before Pause	0
Phase FOV	1.00
Auto Shim	Auto
Phase Correction	No
RF Drive Mode	Single
Excitation Mode	Selective
FMRI	
PSD Trigger	Internal
View Order	Bottom/Up
# of Repetitions REST	0
# of Repetitions ACTIVE	0
SAT	
SAT Location	A
SAT Location	S
SAT Location	I
Tag Type	None
TRICKS	
Pause On/Off	On
Auto Subtract	0
Auto SCIC	3
CONTRAST	
Contrast Yes/No	No

SCAN TIMING	
Flip Angle	160
TE	Min Full
Number of Echoes	1
TR	527.0
Echo Train Length	5
Receiver Bandwidth	25.00
IMAGE ENHANCE	
Filter Choice	None
USER CVS	
User CV12	1.00
User CV18	1.00
TR Min	300.0
TR Max	750.0
User CV30	1.00
User CV39	1.00
User CV Mask2	256
MULTI-PHASE	
Seperate Series	0
Mask Phase	0
Mask Pause	0
Preserve	0
DIFFUSION	
Recon All Images	On
Multi b-values	1000.0;
Multi NEX Values	1.0;
# Synthetic b-values	1
Synthetic b-value	1000.0;
TRACKER	
Tracker Length	200.0
Tracker Thickness	20.0

Sag T1 Fast TOP - Sag T1 Fast TOP



MSK-THR HIP NEW

Protocol: adult\_spine\_Ultrafast 3 part w spine

Ax T2 FRFSE- Fast - Ax T2 FRFSE- Fast	<b>IMAGING PARAMETERS</b>		<b>SCAN TIMING</b>	
	Imaging Mode	2D	Flip Angle	160
	Pulse Sequence	FSE-XL	TE	88.0
	Imaging Options	FC, EDR, TRF, Fast, FR, ARC	Number of Echoes	1
	Phase	2.00	TR	5718.0
	<b>SCAN RANGE</b>		Echo Train Length	19
	FOV	19.0	Receiver Bandwidth	27.78
	Slice Thickness	3.50	<b>IMAGE ENHANCE</b>	
	Slice Spacing	0.3	Filter Choice	None
	Overlap Locations	0	<b>USER CVS</b>	
	Number of Slices	27	User CV12	1.00
	<b>ACQ TIMING</b>		User CV15	0
	Freq	320	TR Min	2500.0
	Phase	256	TR Max	11000.0
	Freq DIR	A/P	User CV30	1.00
	Fat Shift DIR	Normal (A)	User CV39	1.00
	NEX	1.00	User CV Mask2	256
	Phase FOV	1.00	<b>MULTI-PHASE</b>	
	Auto Shim	Auto	Seperate Series	0
	Phase Correction	Yes	Mask Phase	0
	Flow Direction Compensation	Slice	Mask Pause	0
	RF Drive Mode	Single	Preserve	0
	Excitation Mode	Selective	<b>DIFFUSION</b>	
Ax T2 FRFSE- Fast - Ax T2 FRFSE- Fast	<b>FMRI</b>		Recon All Images	On
	PSD Trigger	Internal	Multi b-values	1000.0;
	View Order	Bottom/Up	Multi NEX Values	1.0;
	# of Repetitions REST	0	# Synthetic b-values	1
	# of Repetitions ACTIVE	0	Synthetic b-value	1000.0;
	<b>SAT</b>		<b>CONTRAST</b>	
	Tag Type	None	Contrast Yes/No	No
	<b>TRICKS</b>			
	Pause On/Off	On		
	Auto Subtract	0		
	Auto SCIC	3		

MSK-THR HIP NEW

Protocol: adult\_spine\_Ultrafast 3 part w spine

SAG T2 MID Fast - SAG T2 MID Fast	<b>IMAGING PARAMETERS</b>		<b>SCAN TIMING</b>	
	Imaging Mode	2D	Flip Angle	160
	Pulse Sequence	FSE-XL	TE	120.0
	Imaging Options	FC, EDR, TRF, Fast, ZIP512, FR, ARC	Number of Echoes	1
	Phase	2.00	TR	5849.0
	<b>SCAN RANGE</b>		Echo Train Length	25
	FOV	32.0	Receiver Bandwidth	27.78
	Slice Thickness	3.00	<b>IMAGE ENHANCE</b>	
	Slice Spacing	0.3	Filter Choice	None
	Overlap Locations	0	<b>USER CVS</b>	
	Number of Slices	18	User CV12	1.00
	<b>ACQ TIMING</b>		User CV15	0
	Freq	400	User CV18	1.00
	Phase	256	TR Min	2500.0
	Freq DIR	A/P	TR Max	11000.0
	Fat Shift DIR	Normal (P)	User CV30	1.00
	NEX	1.00	User CV39	1.00
	Phase FOV	1.00	User CV Mask2	256
	Auto Shim	Auto	<b>MULTI-PHASE</b>	
	Phase Correction	Yes	Seperate Series	0
	Flow Direction Compensation	Freq	Mask Phase	0
	RF Drive Mode	Single	Mask Pause	0
	Excitation Mode	Selective	Preserve	0
	<b>FMRI</b>		<b>DIFFUSION</b>	
	PSD Trigger	Internal	Recon All Images	On
	View Order	Bottom/Up	Multi b-values	1000.0;
	# of Repetitions REST	0	Multi NEX Values	1.0;
	# of Repetitions ACTIVE	0	# Synthetic b-values	1
	<b>SAT</b>		Synthetic b-value	1000.0;
	Tag Type	None	<b>CONTRAST</b>	
	<b>TRICKS</b>		Contrast Yes/No	No
	Pause On/Off	On		
	Auto Subtract	0		
	Auto SCIC	3		

SAG T2 MID Fast - SAG T2 MID Fast

## MSK-THR HIP NEW

Protocol: adult\_spine\_Ultrafast 3 part w spine

Sag T1 MID Fast - Sag T1 MID Fast	<b>IMAGING PARAMETERS</b>		<b>SCAN TIMING</b>	
	Imaging Mode	2D	Flip Angle	160
	Pulse Sequence	FSE-XL	TE	Min Full
	Imaging Options	EDR, TRF, Fast, ZIP512, ARC	Number of Echoes	1
	Phase	2.00	TR	430.0
	<b>SCAN RANGE</b>		Echo Train Length	4
	FOV	32.0	Receiver Bandwidth	31.25
	Slice Thickness	3.00	<b>IMAGE ENHANCE</b>	
	Slice Spacing	0.3	Filter Choice	None
	Overlap Locations	0	<b>USER CVS</b>	
	Number of Slices	18	User CV12	1.00
	<b>ACQ TIMING</b>		User CV18	1.00
	Freq	400	TR Min	300.0
	Phase	256	TR Max	750.0
	Freq DIR	A/P	User CV30	1.00
	Fat Shift DIR	Normal (P)	User CV39	1.00
	NEX	1.00	User CV Mask2	256
	# of Acq. Before Pause	0	<b>MULTI-PHASE</b>	
	Phase FOV	1.00	Seperate Series	0
	Auto Shim	Auto	Mask Phase	0
	Phase Correction	No	Mask Pause	0
	RF Drive Mode	Single	Preserve	0
	Excitation Mode	Selective	<b>DIFFUSION</b>	
Sag T1 MID Fast - Sag T1 MID Fast	<b>FMRI</b>		Recon All Images	On
	PSD Trigger	Internal	Multi b-values	1000.0;
	View Order	Bottom/Up	Multi NEX Values	1.0;
	# of Repetitions REST	0	# Synthetic b-values	1
	# of Repetitions ACTIVE	0	Synthetic b-value	1000.0;
	<b>SAT</b>		<b>TRACKER</b>	
	Tag Type	None	Tracker Length	200.0
	<b>TRICKS</b>		Tracker Thickness	20.0
	Pause On/Off	On		
	Auto Subtract	0		
	Auto SCIC	3		
	<b>CONTRAST</b>			
	Contrast Yes/No	No		

MSK-THR HIP NEW

Protocol: adult\_spine\_Ultrafast 3 part w spine

SAG T2 BOT Fast - SAG T2 BOT Fast	<b>IMAGING PARAMETERS</b>		<b>SCAN TIMING</b>	
	Imaging Mode	2D	Flip Angle	160
	Pulse Sequence	FSE-XL	TE	120.0
	Imaging Options	FC, EDR, TRF, Fast, ZIP512, FR, ARC	Number of Echoes	1
	Phase	1.60	TR	6095.0
	<b>SCAN RANGE</b>		Echo Train Length	25
	FOV	28.0	Receiver Bandwidth	27.78
	Slice Thickness	3.00	<b>IMAGE ENHANCE</b>	
	Slice Spacing	0.3	Filter Choice	None
	Overlap Locations	0	<b>USER CVS</b>	
	Number of Slices	18	User CV12	1.00
	<b>ACQ TIMING</b>		User CV15	0
	Freq	416	User CV18	1.00
	Phase	256	TR Min	2500.0
	Freq DIR	A/P	TR Max	11000.0
	Fat Shift DIR	Normal (P)	User CV30	1.00
	NEX	1.00	User CV39	1.00
	Phase FOV	1.00	User CV Mask2	256
	Auto Shim	Auto	<b>MULTI-PHASE</b>	
	Phase Correction	Yes	Seperate Series	0
	Flow Direction Compensation	Freq	Mask Phase	0
	RF Drive Mode	Single	Mask Pause	0
	Excitation Mode	Selective	Preserve	0
SAG T2 BOT Fast - SAG T2 BOT Fast	<b>FMRI</b>		<b>DIFFUSION</b>	
	PSD Trigger	Internal	Recon All Images	On
	View Order	Bottom/Up	Multi b-values	1000.0;
	# of Repetitions REST	0	Multi NEX Values	1.0;
	# of Repetitions ACTIVE	0	# Synthetic b-values	1
	<b>SAT</b>		Synthetic b-value	1000.0;
	Tag Type	None	<b>CONTRAST</b>	
	<b>TRICKS</b>		Contrast Yes/No	No
	Pause On/Off	On		
	Auto Subtract	0		
	Auto SCIC	3		

## MSK-THR HIP NEW

Protocol: adult\_spine\_Ultrafast 3 part w spine

**IMAGING PARAMETERS**

Imaging Mode 2D  
Pulse Sequence FSE-XL  
Imaging Options EDR, TRF, Fast, ZIP512, ARC  
Phase 2.00

**SCAN RANGE**

FOV 28.0  
Slice Thickness 3.00  
Slice Spacing 0.3  
Overlap Locations 0  
Number of Slices 18

**ACQ TIMING**

Freq 384  
Phase 256  
Freq DIR A/P  
Fat Shift DIR Normal (P)  
NEX 1.00  
# of Acq. Before Pause 0  
Phase FOV 1.00  
Auto Shim Auto  
Phase Correction No  
RF Drive Mode Single  
Excitation Mode Selective

**FMRI**

PSD Trigger Internal  
View Order Bottom/Up  
# of Repetitions REST 0  
# of Repetitions ACTIVE 0

**SAT**

Tag Type None

**TRICKS**

Pause On/Off On  
Auto Subtract 0  
Auto SCIC 3

**CONTRAST**

Contrast Yes/No No

**SCAN TIMING**

Flip Angle 160  
TE Min Full  
Number of Echoes 1  
TR 585.0  
Echo Train Length 5  
Receiver Bandwidth 25.00

**IMAGE ENHANCE**

Filter Choice None

**USER CVS**

User CV12 1.00  
TR Min 300.0  
TR Max 750.0  
User CV30 1.00  
User CV39 1.00  
User CV Mask2 256

**MULTI-PHASE**

Seperate Series 0  
Mask Phase 0  
Mask Pause 0  
Preserve 0

**DIFFUSION**

Recon All Images On  
Multi b-values 1000.0;  
Multi NEX Values 1.0;  
# Synthetic b-values 1  
Synthetic b-value 1000.0;

**TRACKER**

Tracker Length 200.0  
Tracker Thickness 20.0

Sag T1 BOT Fast - Sag T1 BOT Fast

Sag T1 BOT Fast - Sag T1 BOT Fast

MSK-THR HIP NEW

Protocol: adult\_spine\_Ultrafast 3 part w spine

Ax T2 FRFSE- if required - Ax T2 FRFSE- if required	<b>IMAGING PARAMETERS</b>		<b>SCAN TIMING</b>	
	Imaging Mode	2D	Flip Angle	160
	Pulse Sequence	FSE-XL	TE	88.0
	Imaging Options	FC, EDR, TRF, Fast, FR, ARC	Number of Echoes	1
	Phase	2.00	TR	5844.0
	<b>SCAN RANGE</b>		Echo Train Length	19
	FOV	19.0	Receiver Bandwidth	27.78
	Slice Thickness	3.50	<b>IMAGE ENHANCE</b>	
	Slice Spacing	0.3	Filter Choice	None
	Overlap Locations	0	<b>USER CVS</b>	
	Number of Slices	27	User CV12	1.00
	<b>ACQ TIMING</b>		User CV15	0
	Freq	320	TR Min	2500.0
	Phase	256	TR Max	11000.0
	Freq DIR	A/P	User CV30	1.00
	Fat Shift DIR	Normal (A)	User CV39	1.00
	NEX	1.00	User CV Mask2	256
	Phase FOV	1.00	<b>MULTI-PHASE</b>	
	Auto Shim	Auto	Seperate Series	0
	Phase Correction	Yes	Mask Phase	0
	Flow Direction Compensation	Slice	Mask Pause	0
	RF Drive Mode	Single	Preserve	0
	Excitation Mode	Selective	<b>DIFFUSION</b>	
	<b>FMRI</b>		Recon All Images	On
	PSD Trigger	Internal	Multi b-values	1000.0;
	View Order	Bottom/Up	Multi NEX Values	1.0;
	# of Repetitions REST	0	# Synthetic b-values	1
	# of Repetitions ACTIVE	0	Synthetic b-value	1000.0;
	<b>SAT</b>		<b>CONTRAST</b>	
	Tag Type	None	Contrast Yes/No	No
	<b>TRICKS</b>			
	Pause On/Off	On		
	Auto Subtract	0		
	Auto SCIC	3		

Ax T2 FRFSE- if required - Ax T2 FRFSE- if required

## MSK-THR HIP NEW

## Protocol: adult\_spine\_Ultrafast 3 part w spine

SAG STIR BOT Fast - SAG STIR BOT Fast	<b>IMAGING PARAMETERS</b>		<b>SCAN TIMING</b>	
	Imaging Mode	2D	Flip Angle	160
	Pulse Sequence	FSE-XL	TE	120.0
	Imaging Options	FC, Seq, EDR, TRF, Fast, ZIP512, FR, ARC, IrP	Number of Echoes	1
	Phase	2.00	TR	4190.0
	<b>SCAN RANGE</b>		TI	150
	FOV	28.0	Echo Train Length	25
	Slice Thickness	3.00	Receiver Bandwidth	27.78
	Slice Spacing	0.3	<b>IMAGE ENHANCE</b>	
	Overlap Locations	0	Filter Choice	None
	Number of Slices	18	<b>USER CVS</b>	
	<b>ACQ TIMING</b>		User CV12	1.00
	Freq	416	User CV15	0
	Phase	256	User CV18	1.00
	Freq DIR	A/P	TR Min	2500.0
	Fat Shift DIR	Normal (P)	TR Max	11000.0
	NEX	1.00	User CV30	1.00
	Phase FOV	1.00	User CV39	1.00
	Auto Shim	Auto	User CV Mask2	256
	Phase Correction	Yes	<b>MULTI-PHASE</b>	
	Flow Direction Compensation	Freq	Seperate Series	0
	RF Drive Mode	Single	Mask Phase	0
	Excitation Mode	Selective	Mask Pause	0
	<b>FMRI</b>		Preserve	0
	PSD Trigger	Internal	<b>DIFFUSION</b>	
	View Order	Bottom/Up	Recon All Images	On
	# of Repetitions REST	0	Multi b-values	1000.0;
	# of Repetitions ACTIVE	0	Multi NEX Values	1.0;
	<b>SAT</b>		# Synthetic b-values	1
	Tag Type	None	Synthetic b-value	1000.0;
	<b>TRICKS</b>		<b>CONTRAST</b>	
	Pause On/Off	On	Contrast Yes/No	No
	Auto Subtract	0		
	Auto SCIC	3		

SAG STIR BOT Fast - SAG STIR BOT Fast