

## MSK-THR HIP NEW

Protocol: adult\_upperExtremities\_MSK ARDL 2022-Hand std

3-Plane Loc Left - 3-Plane Loc Left	<b>IMAGING PARAMETERS</b>		<b>SCAN TIMING</b>	
	Imaging Mode	2D	Number of Echoes	1
	Pulse Sequence	Gradient Echo	<b>IMAGE ENHANCE</b>	
	Imaging Options	Seq, Fast	Filter Choice	None
	<b>SCAN RANGE</b>		<b>GATING/TRIGGER</b>	
	FOV	28.0	Pause After Navigator Prescan	0
	Slice Thickness	5.00	<b>FMRI</b>	
	Slice Spacing	5.0	PSD Trigger	Internal
	Overlap Locations	0	View Order	Bottom/Up
	<b>ACQ TIMING</b>		# of Repetitions REST	0
	Freq	256	# of Repetitions ACTIVE	0
	Phase	128	<b>SAT</b>	
	Freq DIR	Unswap	Tag Type	None
	NEX	1.00	<b>TRICKS</b>	
	Phase FOV	1.00	Pause On/Off	On
	Auto Shim	Auto	Auto Subtract	0
	Phase Correction	No	Auto SCIC	Off
	RF Drive Mode	Single	<b>OTHERS</b>	
	Excitation Mode	Selective	Protocol Notes	Ligament tear of hand - finger protocol should be done
	<b>USER CVS</b>			
	User CV20	1.00		
	User CV Mask2	0		
	<b>MULTI-PHASE</b>			
	Seperate Series	0		
	Mask Phase	0		
	Mask Pause	0		
	Preserve	0		
	<b>DIFFUSION</b>			
	Recon All Images	On		
	# Synthetic b-values	1		
	Synthetic b-value	1000.0;		
	<b>CONTRAST</b>			
	Contrast Yes/No	No		

3-Plane Loc Left - 3-Plane Loc Left

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3-Plane Loc Right - 3-Plane Loc Right	<b>IMAGING PARAMETERS</b>		<b>SCAN TIMING</b>	
	Imaging Mode	2D	Number of Echoes	1
	Pulse Sequence	Gradient Echo	<b>IMAGE ENHANCE</b>	
	Imaging Options	Seq, Fast	Filter Choice	None
	<b>SCAN RANGE</b>		<b>GATING/TRIGGER</b>	
	FOV	28.0	Auto Trigger Type	Off
	Slice Thickness	5.0	Pause After Navigator	0
	Slice Spacing	5.0	Prescan	
	<b>ACQ TIMING</b>		<b>FMRI</b>	
	Freq	256	PSD Trigger	Internal
	Phase	128	Slice Order	Interleaved
	Freq DIR	Unswap	View Order	Bottom/Up
	NEX	1.00	# of Repetitions REST	0
	Phase FOV	1.00	# of Repetitions ACTIVE	0
	Auto Shim	Auto	<b>SAT</b>	
	Phase Correction	No	Tag Type	None
	RF Drive Mode	Single	<b>TRICKS</b>	
	Excitation Mode	Selective	Pause On/Off	On
	<b>USER CVS</b>		Auto Subtract	0
	User CV Mask2	0	Auto SCIC	Off
	<b>MULTI-PHASE</b>		<b>OTHERS</b>	
	Seperate Series	0	Protocol Notes	Ligament tear hand - finger protocol should be done
	Mask Phase	0		
	Mask Pause	0		
	Preserve	0		
	<b>DIFFUSION</b>			
	Recon All Images	On		
	# Synthetic b-values	1		
	Synthetic b-value	1000.0;		
	<b>CONTRAST</b>			
	Contrast Yes/No	No		

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**IMAGING PARAMETERS**

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

**SCAN RANGE**

FOV *28.0*  
Slice Thickness *5.0*  
Slice Spacing *5.0*

**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 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**

Auto Trigger Type *Off*  
Pause After Navigator Prescan *0*

**FMRI**

PSD Trigger *Internal*  
Slice Order *Interleaved*  
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*

**OTHERS**

Protocol Notes *Ligament tear hand - finger protocol should be done*

---YES/NO CONSENT---YES/NO CONSENT---

---YES/NO CONSENT---YES/NO CONSENT---

## MSK-THR HIP NEW

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**IMAGING PARAMETERS**

Imaging Mode 2D  
Pulse Sequence FSE-XL  
Imaging Options EDR, TRF, Fast

**SCAN RANGE**

FOV 22.0  
Slice Thickness 3.00  
Slice Spacing 0.5  
Overlap Locations 0  
Number of Slices 19

**ACQ TIMING**

Freq 384  
Phase 288  
Freq DIR S/I  
Fat Shift DIR Normal (I)  
NEX 0.50  
Phase FOV 1.00  
Auto Shim Auto  
Phase Correction Yes  
RF Drive Mode Single  
Excitation Mode Selective

**FMRI**

PSD Trigger Internal  
Slice Order Interleaved  
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 2

**SCAN TIMING**

Flip Angle 160  
TE Min Full  
Number of Echoes 1  
TR 498.0  
Echo Train Length 4  
Receiver Bandwidth 31.25

**IMAGE ENHANCE**

Filter Choice None

**USER CVS**

User CV12 1.00  
User CV17 1.00  
User CV21 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  
# Synthetic b-values 1  
Synthetic b-value 1000.0;

**CONTRAST**

Contrast Yes/No No

Cor T1 - Cor T1

Cor T1 - Cor T1

## MSK-THR HIP NEW

Protocol: adult\_upperExtremities\_MSK ARDL 2022-Hand std

COR PD FS - COR PD FS

IMAGING PARAMETERS	
Imaging Mode	2D
Pulse Sequence	FSE-XL
Imaging Options	EDR, TRF, Fast, FR
SCAN RANGE	
FOV	22.0
Slice Thickness	3.00
Slice Spacing	0.5
Overlap Locations	0
Number of Slices	30
ACQ TIMING	
Freq	256
Phase	192
Freq DIR	S/I
Fat Shift DIR	Normal (S)
NEX	2.00
Phase FOV	1.00
Auto Shim	Auto
Phase Correction	Yes
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
Fat/Water Saturation	Fat Classic
TRICKS	
Pause On/Off	On
Auto Subtract	0
Auto SCIC	2

SCAN TIMING	
Flip Angle	160
TE	39.0
Number of Echoes	1
TR	3166.0
Echo Train Length	7
Receiver Bandwidth	25.00
IMAGE ENHANCE	
Filter Choice	None
USER CVS	
User CV12	1.00
User CV15	2.00
User CV19	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

COR PD FS - COR PD FS

## MSK-THR HIP NEW

Protocol: adult\_upperExtremities\_MSK ARDL 2022-Hand std

**IMAGING PARAMETERS**

Imaging Mode 2D  
Pulse Sequence FSE-XL  
Imaging Options EDR, TRF, Fast, FR

**SCAN RANGE**

FOV 20.0  
Slice Thickness 4.00  
Slice Spacing 1.0  
Overlap Locations 0

**ACQ TIMING**

Freq 256  
Phase 192  
Freq DIR A/P  
Fat Shift DIR Normal (A)  
NEX 2.00  
Phase FOV 1.00  
Auto Shim Auto  
Phase Correction Yes  
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  
Fat/Water Saturation Fat Classic

**TRICKS**

Pause On/Off On  
Auto Subtract 0  
Auto SCIC 2

**SCAN TIMING**

Flip Angle 160  
TE 39.0  
Number of Echoes 1  
TR 3133.0  
Echo Train Length 7  
Receiver Bandwidth 25.00

**IMAGE ENHANCE**

Filter Choice None

**USER CVS**

User CV12 1.00  
User CV15 2.00  
User CV19 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  
# Synthetic b-values 1  
Synthetic b-value 1000.0;

**CONTRAST**

Contrast Yes/No No

Ax PD FS - Ax PD FS

Ax PD FS - Ax PD FS

## MSK-THR HIP NEW

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## IMAGING PARAMETERS

Imaging Mode 2D  
Pulse Sequence FSE-XL  
Imaging Options EDR, TRF, Fast

## SCAN RANGE

FOV 22.0  
Slice Thickness 3.00  
Slice Spacing 0.5  
Overlap Locations 0  
Number of Slices 58

## ACQ TIMING

Freq 256  
Phase 192  
Freq DIR R/L  
Fat Shift DIR Normal (L)  
NEX 1.50  
# of Acq. Before Pause 0  
Phase FOV 1.00  
Auto Shim Auto  
Phase Correction Yes  
RF Drive Mode Single  
Excitation Mode Selective

## FMRI

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

## SAT

Tag Type None  
Fat/Water Saturation Fat Classic

## TRICKS

Pause On/Off On  
Auto Subtract 0  
Auto SCIC Off

## CONTRAST

Contrast Yes/No No

## SCAN TIMING

Flip Angle 160  
TE 68.0  
Number of Echoes 1  
TR 5558.0  
Echo Train Length 20  
Receiver Bandwidth 31.25

## IMAGE ENHANCE

Filter Choice None

## USER CVS

User CV12 1.00  
User CV15 2.00  
User CV19 1.00  
User CV21 1.00  
TR Min 3000.0  
TR Max 10000.0  
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  
# Synthetic b-values 1  
Synthetic b-value 1000.0;

## TRACKER

Tracker Length 200.0  
Tracker Thickness 20.0

Sag T2 FS - Sag T2 FS

Sag T2 FS - Sag T2 FS

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**IMAGING PARAMETERS**

Imaging Mode 2D  
Pulse Sequence FSE-XL  
Imaging Options EDR, TRF, Fast, FR

**SCAN RANGE**

FOV 20.0  
Slice Thickness 3.0  
Slice Spacing 0.5  
Number of Slices 30

**ACQ TIMING**

Freq 256  
Phase 192  
Freq DIR S/I  
Fat Shift DIR Normal (S)  
NEX 2.00  
Auto Shim Auto  
Phase Correction Yes  
RF Drive Mode Single  
Excitation Mode Selective

**USER CVS**

User CV15 2.00  
User CV19 1.00  
TR Min 2500.0  
TR Max 11000.0  
User CV39 1.00  
User CV Mask2 256

**MULTI-PHASE**

Seperate Series 0  
Mask Phase 0  
Mask Pause 0

**DIFFUSION**

Recon All Images On

**CONTRAST**

Contrast Yes/No No

**SCAN TIMING**

Flip Angle 160  
TE 39.0  
Number of Echoes 1  
TR 3331.0  
Echo Train Length 7  
Receiver Bandwidth 25.00

**IMAGE ENHANCE**

Filter Choice C

**GATING/TRIGGER**

Auto Trigger Type Off

**FMRI**

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

**SAT**

SAT Location R  
Tag Type None  
Fat/Water Saturation Fat Classic

**TRICKS**

Pause On/Off On  
Auto Subtract 0  
Auto SCIC 2

--Optional--

--Optional--



MSK-THR HIP NEW

Protocol: adult\_upperExtremities\_MSK ARDL 2022-Hand std

AX STIR - AX STIR	IMAGING PARAMETERS		SCAN TIMING	
	Imaging Mode	2D	Flip Angle	160
	Pulse Sequence	FSE-XL	TE	42.0
	Imaging Options	FC, Seq, EDR, TRF, Fast, ARC, IrP	Number of Echoes	1
	Phase	2.00	TR	5727.0
	SCAN RANGE		TI	150
	FOV	20.0	Echo Train Length	13
	Slice Thickness	4.00	Receiver Bandwidth	35.71
	Slice Spacing	1.0	IMAGE ENHANCE	
	Overlap Locations	0	Filter Choice	None
	Number of Slices	42	USER CVS	
	ACQ TIMING		User CV12	1.00
	Freq	288	TR Min	2000.0
	Phase	224	TR Max	6000.0
	Freq DIR	R/L	User CV30	1.00
	Fat Shift DIR	Normal (L)	User CV39	1.00
	NEX	3.00	User CV Mask2	256
	# of Acq. Before Pause	0	MULTI-PHASE	
	Phase FOV	0.70	Seperate Series	0
	Auto Shim	Auto	Mask Phase	0
	Phase Correction	No	Mask Pause	0
	Flow Direction Compensation	Freq	Preserve	0
	RF Drive Mode	Single	DIFFUSION	
	Excitation Mode	Selective	Recon All Images	On
	FMRI		# Synthetic b-values	1
	PSD Trigger	Internal	Synthetic b-value	1000.0;
	Slice Order	Interleaved	CONTRAST	
	View Order	Bottom/Up	Contrast Yes/No	No
	# of Repetitions REST	0		
	# of Repetitions ACTIVE	0		
SAT				
SAT Location	S			
SAT Location	I			
Tag Type	None			
TRICKS				
Pause On/Off	On			
Auto Subtract	0			
Auto SCIC	2			

AX STIR - AX STIR	
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AX STIR - AX STIR