

Protocol: adult\_lowerExtremities\_MSK Knee ARDL

3 Plane Localizer Right - 3 Plane Localizer Right

IMAGING PARAMETERS	
Imaging Mode	2D
Pulse Sequence	Spin Echo
Imaging Options	Seq, EDR, TRF, Fast, SS, ARC
Phase	3.00
SCAN RANGE	
FOV	28.0
Slice Thickness	7.00
Slice Spacing	5.0
Overlap Locations	0
ACQ TIMING	
Freq	384
Phase	256
Freq DIR	Unswap
# of Acq. Before Pause	0
Phase FOV	1.00
Auto Shim	Auto
Phase Correction	No
RF Drive Mode	Optimized
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	Off

SCAN TIMING	
TE	80.0
Number of Echoes	1
TR	Minimum
Receiver Bandwidth	62.50
IMAGE ENHANCE	
Filter Choice	None
USER CVS	
User CV1	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

3 Plane Localizer Right - 3 Plane Localizer Right

Protocol: adult\_lowerExtremities\_MSK Knee ARDL

**IMAGING PARAMETERS**

Imaging Mode	2D
Pulse Sequence	FSE-XL
Imaging Options	FC, EDR, TRF, Fast, ZIP1024, FR, ARC
Phase	2.00

**SCAN RANGE**

FOV	16.0
Slice Thickness	3.00
Slice Spacing	0.3
Overlap Locations	0
Number of Slices	45

**ACQ TIMING**

Freq	512
Phase	416
Freq DIR	A/P
Fat Shift DIR	Normal (A)
NEX	1.00
Phase FOV	1.00
Auto Shim	Auto
Phase Correction	Yes
Flow Direction Compensation	Slice
RF Drive Mode	Optimized
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	3

**SCAN TIMING**

Flip Angle	142
TE	30.0
Number of Echoes	1
TR	3903.0
Echo Train Length	8
Receiver Bandwidth	83.33

**IMAGE ENHANCE**

Filter Choice	None
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**USER CVS**

User CV19	0.80
TR Min	2500.0
TR Max	6000.0
User CV30	1.00
User CV Mask2	1024

**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
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Ax PD frFSE FS - Ax PD frFSE FS

Ax PD frFSE FS - Ax PD frFSE FS

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**IMAGING PARAMETERS**

Imaging Mode	2D
Pulse Sequence	FSE-XL
Imaging Options	EDR, TRF, Fast, ZIP1024, FR, ARC
Phase	2.00

**SCAN RANGE**

FOV	16.0
Slice Thickness	3.00
Slice Spacing	0.3
Overlap Locations	0

**ACQ TIMING**

Freq	512
Phase	416
Freq DIR	S/I
Fat Shift DIR	Normal (I)
NEX	1.50
Phase FOV	1.00
Auto Shim	Auto
Phase Correction	Yes
RF Drive Mode	Optimized
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	3

**SCAN TIMING**

Flip Angle	142
TE	30.0
Number of Echoes	1
TR	2153.0
Echo Train Length	9
Receiver Bandwidth	83.33

**IMAGE ENHANCE**

Filter Choice	None
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**USER CVS**

User CV19	0.80
TR Min	1800.0
TR Max	4000.0
User CV Mask2	1024

**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
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Cor PD frFSE FS - Cor PD frFSE FS

Cor PD frFSE FS - Cor PD frFSE FS

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**IMAGING PARAMETERS**

Imaging Mode	2D
Pulse Sequence	FSE-XL
Imaging Options	EDR, TRF, Fast, ZIP1024, ARC
Phase	2.00

**SCAN RANGE**

FOV	16.0
Slice Thickness	3.00
Slice Spacing	0.3
Overlap Locations	0
Number of Slices	45

**ACQ TIMING**

Freq	512
Phase	512
Freq DIR	A/P
Fat Shift DIR	Normal (A)
NEX	1.00
Phase FOV	1.00
Auto Shim	Auto
Phase Correction	Yes
RF Drive Mode	Optimized
Excitation Mode	Selective

**FMRI**

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

**SAT**

Tag Type	None
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**TRICKS**

Pause On/Off	On
Auto Subtract	0
Auto SCIC	3

**SCAN TIMING**

Flip Angle	142
TE	Min Full
Number of Echoes	1
TR	513.0
Echo Train Length	5
Receiver Bandwidth	83.33

**IMAGE ENHANCE**

Filter Choice	None
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**USER CVS**

User CV21	1.00
TR Min	350.0
TR Max	600.0
User CV Mask2	1024

**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
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Cor T1 FSE - Cor T1 FSE

Cor T1 FSE - Cor T1 FSE

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**IMAGING PARAMETERS**

Imaging Mode	2D
Pulse Sequence	FSE-XL
Imaging Options	EDR, TRF, Fast, ZIP1024, FR, ARC
Phase	2.00

**SCAN RANGE**

FOV	16.0
Slice Thickness	3.00
Slice Spacing	0.3
Overlap Locations	0
Number of Slices	40

**ACQ TIMING**

Freq	512
Phase	416
Freq DIR	A/P
Fat Shift DIR	Normal (P)
NEX	1.00
Phase FOV	1.00
Auto Shim	Auto
Phase Correction	Yes
RF Drive Mode	Optimized
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	3

**SCAN TIMING**

Flip Angle	142
TE	17.0
Number of Echoes	1
TR	1996.0
Echo Train Length	9
Receiver Bandwidth	83.33

**IMAGE ENHANCE**

Filter Choice	None
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**USER CVS**

User CV19	1.00
User CV21	1.00
TR Min	1800.0
TR Max	4000.0
User CV Mask2	1024

**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
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Sag PD FS frFSE - Sag PD FS frFSE

Sag PD FS frFSE - Sag PD FS frFSE

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**IMAGING PARAMETERS**

Imaging Mode	2D
Pulse Sequence	FSE-XL
Imaging Options	EDR, TRF, Fast, ZIP1024, FR, ARC
Phase	2.00

**SCAN RANGE**

FOV	16.0
Slice Thickness	3.00
Slice Spacing	0.3
Overlap Locations	0
Number of Slices	40

**ACQ TIMING**

Freq	512
Phase	512
Freq DIR	A/P
Fat Shift DIR	Normal (P)
NEX	1.00
Phase FOV	1.00
Auto Shim	Auto
Phase Correction	Yes
RF Drive Mode	Optimized
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	3

**SCAN TIMING**

Flip Angle	142
TE	70.0
Number of Echoes	1
TR	6934.0
Echo Train Length	19
Receiver Bandwidth	83.33

**IMAGE ENHANCE**

Filter Choice	None
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**USER CVS**

User CV19	0.80
TR Min	2500.0
TR Max	8000.0
User CV30	1.00
User CV Mask2	1024

**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
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Sag T2 frFSE FS - Sag T2 frFSE FS

Sag T2 frFSE FS - Sag T2 frFSE FS

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Sag MR Bone - Sag MR Bone	<b>IMAGING PARAMETERS</b>		<b>SCAN TIMING</b>	
	Imaging Mode	3D	Flip Angle	1
	Pulse Sequence	SPGR	Number of Echoes	1
	Imaging Options	Fast, SqP	TR	Minimum
	PSD Name	ozteo	Receiver Bandwidth	62.50
	<b>SCAN RANGE</b>		<b>IMAGE ENHANCE</b>	
	FOV	18.0	Filter Choice	G
	Slice Thickness	1.00	<b>GATING/TRIGGER</b>	
	Overlap Locations	0	Pause After Navigator Prescan	0
	Number of Slices	1	<b>FMRI</b>	
	<b>ACQ TIMING</b>		PSD Trigger	Internal
	Freq	180	View Order	Bottom/Up
	Freq DIR	S/I	# of Repetitions REST	0
	NEX	5.60	# of Repetitions ACTIVE	0
	Auto Shim	Auto	<b>SAT</b>	
	Phase Correction	No	Tag Type	None
	RF Drive Mode	Optimized	<b>TRICKS</b>	
	Excitation Mode	Selective	Pause On/Off	On
	Spokes Per Segment	384	Auto Subtract	0
	<b>USER CVS</b>		Auto SCIC	3
	User CV Mask2	1024		
Sag MR Bone - Sag MR Bone	<b>MULTI-PHASE</b>			
	Seperate Series	0		
	Mask Phase	0		
	Mask Pause	0		
	Preserve	0		
	<b>DIFFUSION</b>			
	Recon All Images	On		
	Multi b-values	1000.0;		
	Multi NEX Values	1.0;		
	# Synthetic b-values	1		
	Synthetic b-value	1000.0;		
	<b>CONTRAST</b>			
	Contrast Yes/No	No		

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-----Options-----	<b>IMAGING PARAMETERS</b>		<b>SCAN RANGE</b>	
	Imaging Mode	2D	FOV	24.0
	Pulse Sequence	Gradient Echo	Slice Thickness	10.0
	Imaging Options	Seq, Fast	Slice Spacing	5.0
	Acceleration Factor	1.00	<b>ACQ TIMING</b>	
	<b>IMAGE ENHANCE</b>		Freq	256
	Filter Choice	None	Phase	128
	<b>GATING/TRIGGER</b>		Freq DIR	Unswap
	Auto Trigger Type	Off	NEX	1.00
	<b>MULTI-PHASE</b>		Phase FOV	1.00
	# of Acquisition	0	Auto Shim	Auto
	Seperate Series	0	Phase Correction	No
	Mask Phase	0	RF Drive Mode	Quadrature
	Mask Pause	0	<b>FMRI</b>	
	<b>ASSET</b>		PSD Trigger	Internal
	Slice Acceleration Factor	1.00	Slice Order	Interleaved
	Phase Acceleration Factor	1.00	View Order	Bottom/Up
	<b>CONTRAST</b>		# of Repetitions REST	0
	Contrast Yes/No	No	# of Repetitions ACTIVE	0
			<b>SAT</b>	
			Tag Type	None
			<b>TRICKS</b>	
			Pause On/Off	On
			Auto Subtract	0
			Auto SCiC	Off

-----Options-----



Protocol: adult\_lowerExtremities\_MSK Knee ARDL

**IMAGING PARAMETERS**

Imaging Mode	3D
Pulse Sequence	Cube
Imaging Options	EDR, Fast, ZIP512, FR, ARC
Phase	2.00
Slice	1.00

**SCAN RANGE**

FOV	16.0
Slice Thickness	0.60
Location per Slab	64
Overlap Locations	0

**ACQ TIMING**

Freq	256
Phase	256
Freq DIR	Unswap
Fat Shift DIR	Normal
NEX	1.00
Phase FOV	1.00
Auto Shim	Auto
Phase Correction	No
RF Drive Mode	Optimized
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	3

**CONTRAST**

Contrast Yes/No	No
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**SCAN TIMING**

TE	30.0
Number of Echoes	1
TR	1500.0
Echo Train Length	60
Receiver Bandwidth	83.33

**IMAGE ENHANCE**

Filter Choice	None
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**USER CVS**

User CV5	0.50
User CV12	70.00
User CV22	1.00
User CV30	1.00
User CV32	1.00
User CV34	100.00
User CV Mask2	10

**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

3D Sag PD FS Cube - 3D Sag PD FS Cube

3D Sag PD FS Cube - 3D Sag PD FS Cube