

Protocol: adult_abdomen_RENALS

3-Plane Localizer	PATIENT POSITION		IMAGING PARAMETERS	
	Patient Entry	Feet First	Imaging Mode	2D
	Patient Position	Supine	Pulse Sequence	Spin Echo
	Coil Configuration	HD 8Ch Body Array by GE	Imaging Options	Seq, EDR, Fast, SS, ARC
	Plane	3-PLANE	SCAN RANGE	
	Series Description	3-Plane Localizer	FOV	48.0
	SCAN TIMING		Slice Thickness	8.0
	TE	80.0	Slice Spacing	0.0
	Number of Echoes	1	ACQ TIMING	
	TR	Minimum	Freq	384
	Receiver Bandwidth	83.33	Phase	160
	IMAGE ENHANCE		Freq DIR	Unswap
	Filter Choice	None	# of Acq. Before Pause	0
	GATING/TRIGGER		Phase FOV	1.00
	Auto Trigger Type	Off	Auto Shim	Auto
	FMRI		Phase Correction	No
	PSD Trigger	Internal	USER CVS	
	Slice Order	Interleaved	User CV2	240.00
	View Order	Bottom/Up	MULTI-PHASE	
	# of Repetitions REST	0	Seperate Series	0
	# of Repetitions ACTIVE	0	Mask Phase	0
	SAT		Mask Pause	0
	Tag Type	None	DIFFUSION	
	TRICKS		Recon All Images	On
	Pause On/Off	On	CONTRAST	
	Auto Subtract	0	Contrast Yes/No	No
	Auto SCIC	Off		
	OTHERS			
Protocol Notes	<p><i>This protocol is built based on Express coil suite. Please select the appropriate coil which is available in your site and optimizing the parameters accordingly.</i></p>			

3-Plane Localizer

Protocol: adult_abdomen_RENALS

PATIENT POSITION		IMAGING PARAMETERS	
Patient Entry	<i>Feet First</i>	Imaging Mode	<i>2D</i>
Patient Position	<i>Supine</i>	Pulse Sequence	<i>Spin Echo</i>
Coil Configuration	<i>HD 8Ch Body Array by GE</i>	Imaging Options	<i>EDR, Fast, SS, ARC, MRF</i>
Plane	<i>AXIAL</i>	SCAN RANGE	
Series Description	<i>Ax T2 SSFSE BH</i>	FOV	<i>40.0</i>
SCAN TIMING		Slice Thickness	<i>7.0</i>
TE	<i>85.0</i>	Slice Spacing	<i>1.5</i>
Number of Echoes	<i>1</i>	ACQ TIMING	
TR	<i>Minimum</i>	Freq	<i>288</i>
Receiver Bandwidth	<i>83.33</i>	Phase	<i>222</i>
IMAGE ENHANCE		Freq DIR	<i>R/L</i>
Filter Choice	<i>None</i>	NEX	<i>1.00</i>
GATING/TRIGGER		# of Acq. Before Pause	<i>0</i>
Auto Trigger Type	<i>Off</i>	Phase FOV	<i>1.00</i>
FMRI		Auto Shim	<i>Auto</i>
PSD Trigger	<i>Internal</i>	Phase Correction	<i>No</i>
Slice Order	<i>Interleaved</i>	USER CVS	
View Order	<i>Bottom/Up</i>	User CV2	<i>240.00</i>
# of Repetitions REST	<i>0</i>	MULTI-PHASE	
# of Repetitions ACTIVE	<i>0</i>	Seperate Series	<i>0</i>
SAT		Mask Phase	<i>0</i>
Tag Type	<i>None</i>	Mask Pause	<i>0</i>
TRICKS		DIFFUSION	
Pause On/Off	<i>On</i>	Recon All Images	<i>On</i>
Auto Subtract	<i>0</i>	CONTRAST	
Auto SCIC	<i>2</i>	Contrast Yes/No	<i>No</i>

Ax T2 SSFSE BH

Ax T2 SSFSE BH

Protocol: adult_abdomen_RENALS

Ax T2 SSFSE ASPIR BH	PATIENT POSITION		IMAGING PARAMETERS	
	Patient Entry	<i>Feet First</i>	Imaging Mode	<i>2D</i>
	Patient Position	<i>Supine</i>	Pulse Sequence	<i>Spin Echo</i>
	Coil Configuration	<i>HD 8Ch Body Array by GE</i>	Imaging Options	<i>EDR, Fast, SS, Asset</i>
	Plane	<i>AXIAL</i>	SCAN RANGE	
	Series Description	<i>Ax T2 SSFSE ASPIR BH</i>	FOV	<i>40.0</i>
	SCAN TIMING		Slice Thickness	<i>7.0</i>
	TE	<i>85.0</i>	Slice Spacing	<i>1.5</i>
	Number of Echoes	<i>1</i>	ACQ TIMING	
	TR	<i>Minimum</i>	Freq	<i>260</i>
	TI	<i>130</i>	Phase	<i>230</i>
	Receiver Bandwidth	<i>83.33</i>	Freq DIR	<i>R/L</i>
	IMAGE ENHANCE		NEX	<i>1.00</i>
	Filter Choice	<i>None</i>	# of Acq. Before Pause	<i>0</i>
	GATING/TRIGGER		Phase FOV	<i>0.80</i>
	Auto Trigger Type	<i>Off</i>	Auto Shim	<i>Auto</i>
	FMRI		Phase Correction	<i>No</i>
	PSD Trigger	<i>Internal</i>	USER CVS	
	Slice Order	<i>Interleaved</i>	User CV1	<i>1.00</i>
	View Order	<i>Bottom/Up</i>	User CV2	<i>240.00</i>
	# of Repetitions REST	<i>0</i>	User CV15	<i>1.00</i>
	# of Repetitions ACTIVE	<i>0</i>	MULTI-PHASE	
	SAT		Seperate Series	<i>0</i>
	Tag Type	<i>None</i>	Mask Phase	<i>0</i>
	Fat/Water Saturation	<i>Fat Special</i>	Mask Pause	<i>0</i>
	TRICKS		DIFFUSION	
	Pause On/Off	<i>On</i>	Recon All Images	<i>On</i>
	Auto Subtract	<i>0</i>	CONTRAST	
Auto SCIC	<i>2</i>	Contrast Yes/No	<i>No</i>	

Ax T2 SSFSE ASPIR BH

Protocol: adult_abdomen_RENALS

Cor T2 SSFSE BH	PATIENT POSITION		IMAGING PARAMETERS		Cor T2 SSFSE BH
	Patient Entry	<i>Feet First</i>	Imaging Mode	<i>2D</i>	
	Patient Position	<i>Supine</i>	Pulse Sequence	<i>Spin Echo</i>	
	Coil Configuration	<i>HD 8Ch Body Array by GE</i>	Imaging Options	<i>EDR, Fast, SS, ARC</i>	
	Plane	<i>CORONAL</i>	SCAN RANGE		
	Series Description	<i>Cor T2 SSFSE BH</i>	FOV	<i>42.0</i>	
	SCAN TIMING		Slice Thickness	<i>7.0</i>	
	TE	<i>85.0</i>	Slice Spacing	<i>1.5</i>	
	Number of Echoes	<i>1</i>	ACQ TIMING		
	TR	<i>Minimum</i>	Freq	<i>288</i>	
	Receiver Bandwidth	<i>83.33</i>	Phase	<i>256</i>	
	IMAGE ENHANCE		Freq DIR	<i>S/I</i>	
	Filter Choice	<i>None</i>	NEX	<i>1.00</i>	
	GATING/TRIGGER		# of Acq. Before Pause	<i>0</i>	
	Auto Trigger Type	<i>Off</i>	Phase FOV	<i>1.00</i>	
	FMRI		Auto Shim	<i>Auto</i>	
	PSD Trigger	<i>Internal</i>	Phase Correction	<i>No</i>	
	Slice Order	<i>Interleaved</i>	USER CVS		
	View Order	<i>Bottom/Up</i>	User CV1	<i>1.00</i>	
	# of Repetitions REST	<i>0</i>	User CV2	<i>240.00</i>	
	# of Repetitions ACTIVE	<i>0</i>	MULTI-PHASE		
	SAT		Seperate Series	<i>0</i>	
	Tag Type	<i>None</i>	Mask Phase	<i>0</i>	
	TRICKS		Mask Pause	<i>0</i>	
	Pause On/Off	<i>On</i>	DIFFUSION		
	Auto Subtract	<i>0</i>	Recon All Images	<i>On</i>	
	Auto SCIC	<i>2</i>	CONTRAST		
			Contrast Yes/No	<i>No</i>	

Protocol: adult_abdomen_RENALS

PATIENT POSITION		IMAGING PARAMETERS	
Patient Entry	Feet First	Imaging Mode	2D
Patient Position	Supine	Pulse Sequence	Spin Echo
Coil Configuration	HD 8Ch Body Array by GE	Imaging Options	EPI, DIFF, Asset
Plane	AXIAL	SCAN RANGE	
Series Description	Ax DWI 800/500/50	FOV	40.0
SCAN TIMING		Slice Thickness	7.0
TE	Minimum	Slice Spacing	1.5
Number of Echoes	1	ACQ TIMING	
TR	5492.0	Freq	80
Number of Shots	1	Phase	128
IMAGE ENHANCE		Freq DIR	R/L
Filter Choice	None	Phase FOV	1.00
GATING/TRIGGER		Auto Shim	Auto
Auto Trigger Type	Off	Phase Correction	Yes
FMRI		USER CVS	
PSD Trigger	Internal	User CV0	1.00
Slice Order	Interleaved	User CV1	1.00
View Order	Bottom/Up	User CV9	1.00
# of Repetitions REST	0	User CV17	1.00
# of Repetitions ACTIVE	0	TR Min	2000.0
SAT		TR Max	17000.0
Tag Type	None	MULTI-PHASE	
TRICKS		Seperate Series	0
Pause On/Off	On	Mask Phase	0
Auto Subtract	0	Mask Pause	0
Auto SCIC	2	DIFFUSION	
		Optimized TE	Yes
		Diffusion Directions	64
		Number of Diffusion Directions	1
		Number of T2 Images	0
		Dual Spin Echo	Off
		Recon All Images	On
		CONTRAST	
		Contrast Yes/No	No

Ax DWI 800/500/50

Ax DWI 800/500/50

Protocol: adult_abdomen_RENALS

PATIENT POSITION		IMAGING PARAMETERS	
Patient Entry	<i>Feet First</i>	Imaging Mode	<i>3D</i>
Patient Position	<i>Supine</i>	Pulse Sequence	<i>LAVA</i>
Coil Configuration	<i>HD 8Ch Body Array by GE</i>	Imaging Options	<i>EDR, Fast, ZIP2, ARC, Flex</i>
Plane	<i>AXIAL</i>	IDEAL	<i>15</i>
Series Description	<i>3D Ax LAVA Flex PRE</i>	SCAN RANGE	
SCAN TIMING		FOV	<i>40.0</i>
Flip Angle	<i>12</i>	Slice Thickness	<i>4.0</i>
TE	<i>Minimum</i>	Location per Slab	<i>60</i>
Number of Echoes	<i>2</i>	Overlap Locations	<i>0</i>
Receiver Bandwidth	<i>100.00</i>	ACQ TIMING	
IMAGE ENHANCE		Freq	<i>300</i>
Filter Choice	<i>None</i>	Phase	<i>200</i>
GATING/TRIGGER		Freq DIR	<i>R/L</i>
Auto Trigger Type	<i>Off</i>	NEX	<i>1.00</i>
FMRI		Phase FOV	<i>0.80</i>
PSD Trigger	<i>Internal</i>	Auto Shim	<i>Auto</i>
Slice Order	<i>Interleaved</i>	Phase Correction	<i>No</i>
View Order	<i>Bottom/Up</i>	USER CVS	
# of Repetitions REST	<i>0</i>	User CV4	<i>5.60</i>
# of Repetitions ACTIVE	<i>0</i>	User CV6	<i>1.00</i>
SAT		MULTI-PHASE	
Tag Type	<i>None</i>	Seperate Series	<i>0</i>
TRICKS		Trigger Delay without AV	<i>5.6</i>
Pause On/Off	<i>On</i>	Mask Phase	<i>0</i>
Auto Subtract	<i>0</i>	Mask Pause	<i>0</i>
Auto SCIC	<i>2</i>	DIFFUSION	
		Recon All Images	<i>On</i>
		CONTRAST	
		Contrast Yes/No	<i>No</i>

3D Ax LAVA Flex PRE

3D Ax LAVA Flex PRE

Protocol: adult_abdomen_RENALS

3D Ax LAVA ART/VEN	PATIENT POSITION		IMAGING PARAMETERS	
	Patient Entry	<i>Feet First</i>	Imaging Mode	<i>3D</i>
	Patient Position	<i>Supine</i>	Pulse Sequence	<i>LAVA</i>
	Coil Configuration	<i>HD 8Ch Body Array by GE</i>	Imaging Options	<i>EDR, Fast, ZIP2, ARC</i>
	Plane	<i>AXIAL</i>	IDEAL	<i>15</i>
	Series Description	<i>3D Ax LAVA ART/VEN</i>	SCAN RANGE	
	SCAN TIMING		FOV	<i>40.0</i>
	Flip Angle	<i>12</i>	Slice Thickness	<i>4.0</i>
	Number of Echoes	<i>1</i>	Location per Slab	<i>60</i>
	TI	<i>7</i>	Overlap Locations	<i>0</i>
	Receiver Bandwidth	<i>100.00</i>	ACQ TIMING	
	IMAGE ENHANCE		Freq	<i>300</i>
	Filter Choice	<i>None</i>	Phase	<i>200</i>
	GATING/TRIGGER		Freq DIR	<i>R/L</i>
	Auto Trigger Type	<i>Off</i>	NEX	<i>1.00</i>
	FMRI		Phase FOV	<i>0.80</i>
	PSD Trigger	<i>Internal</i>	Auto Shim	<i>Auto</i>
	Slice Order	<i>Interleaved</i>	Phase Correction	<i>No</i>
	View Order	<i>Bottom/Up</i>	USER CVS	
	# of Repetitions REST	<i>0</i>	User CV4	<i>5.60</i>
	# of Repetitions ACTIVE	<i>0</i>	User CV6	<i>1.00</i>
	SAT		MULTI-PHASE	
	Tag Type	<i>None</i>	Seperate Series	<i>0</i>
	Fat/Water Saturation	<i>Fat Special</i>	Trigger Delay without AV	<i>5.6</i>
	TRICKS		Mask Phase	<i>0</i>
Pause On/Off	<i>On</i>	Mask Pause	<i>0</i>	
Auto Subtract	<i>0</i>	DIFFUSION		
Auto SCIC	<i>2</i>	Recon All Images	<i>On</i>	
		CONTRAST		
		Contrast Yes/No	<i>Yes</i>	

3D Ax LAVA ART/VEN

Protocol: adult_abdomen_RENALS

3D Ax LAVA 3 MIN	PATIENT POSITION		IMAGING PARAMETERS		3D Ax LAVA 3 MIN
	Patient Entry	<i>Feet First</i>	Imaging Mode	<i>3D</i>	
	Patient Position	<i>Supine</i>	Pulse Sequence	<i>LAVA</i>	
	Coil Configuration	<i>HD 8Ch Body Array by GE</i>	Imaging Options	<i>EDR, Fast, ZIP2, ARC</i>	
	Plane	<i>AXIAL</i>	IDEAL	<i>15</i>	
	Series Description	<i>3D Ax LAVA 3 MIN</i>	SCAN RANGE		
	SCAN TIMING		FOV	<i>40.0</i>	
	Flip Angle	<i>12</i>	Slice Thickness	<i>4.0</i>	
	Number of Echoes	<i>1</i>	Location per Slab	<i>60</i>	
	TI	<i>7</i>	Overlap Locations	<i>0</i>	
	Receiver Bandwidth	<i>100.00</i>	ACQ TIMING		
	IMAGE ENHANCE		Freq	<i>300</i>	
	Filter Choice	<i>None</i>	Phase	<i>200</i>	
	GATING/TRIGGER		Freq DIR	<i>R/L</i>	
	Auto Trigger Type	<i>Off</i>	NEX	<i>1.00</i>	
	FMRI		Phase FOV	<i>0.80</i>	
	PSD Trigger	<i>Internal</i>	Auto Shim	<i>Auto</i>	
	Slice Order	<i>Interleaved</i>	Phase Correction	<i>No</i>	
	View Order	<i>Bottom/Up</i>	USER CVS		
	# of Repetitions REST	<i>0</i>	User CV4	<i>5.60</i>	
	# of Repetitions ACTIVE	<i>0</i>	User CV6	<i>1.00</i>	
	SAT		MULTI-PHASE		
	Tag Type	<i>None</i>	Seperate Series	<i>0</i>	
	Fat/Water Saturation	<i>Fat Special</i>	Trigger Delay without AV	<i>5.6</i>	
	TRICKS		Mask Phase	<i>0</i>	
	Pause On/Off	<i>On</i>	Mask Pause	<i>0</i>	
	Auto Subtract	<i>0</i>	DIFFUSION		
	Auto SCIC	<i>2</i>	Recon All Images	<i>On</i>	
		CONTRAST			
		Contrast Yes/No	<i>No</i>		

Protocol: adult_abdomen_RENALS

3D Cor LAVA BH	PATIENT POSITION		IMAGING PARAMETERS		3D Cor LAVA BH
	Patient Entry	<i>Feet First</i>	Imaging Mode	<i>3D</i>	
	Patient Position	<i>Supine</i>	Pulse Sequence	<i>LAVA</i>	
	Coil Configuration	<i>HD 8Ch Body Array by GE</i>	Imaging Options	<i>EDR, Fast, ZIP2, ARC</i>	
	Plane	<i>CORONAL</i>	IDEAL	<i>15</i>	
	Series Description	<i>3D Cor LAVA BH</i>	SCAN RANGE		
	SCAN TIMING		FOV	<i>42.0</i>	
	Flip Angle	<i>12</i>	Slice Thickness	<i>4.2</i>	
	Number of Echoes	<i>1</i>	Location per Slab	<i>42</i>	
	TI	<i>7</i>	Overlap Locations	<i>0</i>	
	Receiver Bandwidth	<i>83.33</i>	ACQ TIMING		
	IMAGE ENHANCE		Freq	<i>336</i>	
	Filter Choice	<i>None</i>	Phase	<i>236</i>	
	GATING/TRIGGER		Freq DIR	<i>S/I</i>	
	Auto Trigger Type	<i>Off</i>	NEX	<i>1.00</i>	
	FMRI		Phase FOV	<i>1.00</i>	
	PSD Trigger	<i>Internal</i>	Auto Shim	<i>Auto</i>	
	Slice Order	<i>Interleaved</i>	Phase Correction	<i>No</i>	
	View Order	<i>Bottom/Up</i>	USER CVS		
	# of Repetitions REST	<i>0</i>	User CV4	<i>5.60</i>	
	# of Repetitions ACTIVE	<i>0</i>	User CV6	<i>1.00</i>	
	SAT		MULTI-PHASE		
	Tag Type	<i>None</i>	Seperate Series	<i>0</i>	
	Fat/Water Saturation	<i>Fat Special</i>	Trigger Delay without AV	<i>5.6</i>	
	TRICKS		Mask Phase	<i>0</i>	
Pause On/Off	<i>On</i>	Mask Pause	<i>0</i>		
Auto Subtract	<i>0</i>	DIFFUSION			
Auto SCIC	<i>2</i>	Recon All Images	<i>On</i>		
		CONTRAST			
		Contrast Yes/No	<i>Yes</i>		

Protocol: adult_abdomen_RENALS

3D Ax LAVA 6 MIN	PATIENT POSITION		IMAGING PARAMETERS		3D Ax LAVA 6 MIN
	Patient Entry	<i>Feet First</i>	Imaging Mode	<i>3D</i>	
	Patient Position	<i>Supine</i>	Pulse Sequence	<i>LAVA</i>	
	Coil Configuration	<i>HD 8Ch Body Array by GE</i>	Imaging Options	<i>EDR, Fast, ZIP2, ARC</i>	
	Plane	<i>AXIAL</i>	IDEAL	<i>15</i>	
	Series Description	<i>3D Ax LAVA 6 MIN</i>	SCAN RANGE		
	SCAN TIMING		FOV	<i>40.0</i>	
	Flip Angle	<i>12</i>	Slice Thickness	<i>4.0</i>	
	Number of Echoes	<i>1</i>	Location per Slab	<i>60</i>	
	TI	<i>7</i>	Overlap Locations	<i>0</i>	
	Receiver Bandwidth	<i>100.00</i>	ACQ TIMING		
	IMAGE ENHANCE		Freq	<i>300</i>	
	Filter Choice	<i>None</i>	Phase	<i>200</i>	
	GATING/TRIGGER		Freq DIR	<i>R/L</i>	
	Auto Trigger Type	<i>Off</i>	NEX	<i>1.00</i>	
	FMRI		Phase FOV	<i>0.80</i>	
	PSD Trigger	<i>Internal</i>	Auto Shim	<i>Auto</i>	
	Slice Order	<i>Interleaved</i>	Phase Correction	<i>No</i>	
	View Order	<i>Bottom/Up</i>	USER CVS		
	# of Repetitions REST	<i>0</i>	User CV4	<i>5.60</i>	
	# of Repetitions ACTIVE	<i>0</i>	User CV6	<i>1.00</i>	
	SAT		MULTI-PHASE		
	Tag Type	<i>None</i>	Seperate Series	<i>0</i>	
	Fat/Water Saturation	<i>Fat Special</i>	Trigger Delay without AV	<i>5.6</i>	
	TRICKS		Mask Phase	<i>0</i>	
Pause On/Off	<i>On</i>	Mask Pause	<i>0</i>		
Auto Subtract	<i>0</i>	DIFFUSION			
Auto SCIC	<i>2</i>	Recon All Images	<i>On</i>		
		CONTRAST			
		Contrast Yes/No	<i>Yes</i>		