

Protocol: adult_head_BRAIN MRA

PATIENT POSITION		IMAGING PARAMETERS	
Patient Entry	Head First	Imaging Mode	2D
Patient Position	Supine	Pulse Sequence	Gradient Echo
Coil Configuration	HD 8Ch High Res Brain Array by Invivo	Imaging Options	Seq, Fast
Plane	3-PLANE	SCAN RANGE	
Series Description	LOC	FOV	30.0
SCAN TIMING		Slice Thickness	5.0
Number of Echoes	1	Slice Spacing	5.0
IMAGE ENHANCE		ACQ TIMING	
Filter Choice	None	Freq	256
GATING/TRIGGER		Phase	128
Auto Trigger Type	Off	Freq DIR	Unswap
MULTI-PHASE		NEX	1.00
Seperate Series	0	Phase FOV	1.00
Mask Phase	0	Auto Shim	Auto
Mask Pause	0	Phase Correction	No
DIFFUSION		FMRI	
Recon All Images	On	PSD Trigger	Internal
CONTRAST		Slice Order	Interleaved
Contrast Yes/No	No	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	<i>This protocol is built based on Express coil suite. Please select the appropriate coil which is available in your site and optimize the parameters accordingly.</i>

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PATIENT POSITION		IMAGING PARAMETERS	
Patient Entry	Head First	Imaging Mode	3D
Patient Position	Supine	Pulse Sequence	Vasc TOF SPGR
Coil Configuration	Express Head Neck Array II by GE	Imaging Options	FC, EDR, ZIP2, Asset
Plane	OBLIQUE	SCAN RANGE	
Series Description	AX 3D TOF	FOV	22.0
SCAN TIMING		Slice Thickness	1.2
Flip Angle	20	Location per Slab	36
TE	Minimum	Overlap Locations	8
Number of Echoes	1	ACQ TIMING	
TR	26.0	Freq	320
Receiver Bandwidth	16.67	Phase	192
IMAGE ENHANCE		Freq DIR	A/P
Filter Choice	None	Phase FOV	1.00
GATING/TRIGGER		Auto Shim	Auto
Auto Trigger Type	Off	Phase Correction	No
FMRI		USER CVS	
PSD Trigger	Internal	User CV5	1.00
Slice Order	Interleaved	User CV7	100.00
View Order	Bottom/Up	MULTI-PHASE	
# of Repetitions REST	0	Seperate Series	0
# of Repetitions ACTIVE	0	Mask Phase	0
SAT		Mask Pause	0
SAT Location	S	VASCULAR	
Tag Type	None	# of Collapse Images	On
Fat/Water Saturation	Fat	# of Projection Images	19
DIFFUSION		Ramp Pulse	I/P/L
Recon All Images	On	TRICKS	
CONTRAST		Pause On/Off	On
Contrast Yes/No	No	Auto Subtract	0
		Auto SCIC	Off

AX 3D TOF

AX 3D TOF

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PATIENT POSITION		IMAGING PARAMETERS	
Patient Entry	Head First	Imaging Mode	2D
Patient Position	Supine	Pulse Sequence	Spin Echo
Coil Configuration	HD 8Ch High Res Brain Array by Invivo	Imaging Options	Fast, SS
Plane	OBLIQUE	SCAN RANGE	
Series Description	---OPTIONS---	FOV	22.0
SCAN TIMING		Slice Thickness	5.0
TE	Minimum	Slice Spacing	1.0
TR	Minimum	ACQ TIMING	
Receiver Bandwidth	83.33	Freq	128
IMAGE ENHANCE		Phase	128
Filter Choice	None	Freq DIR	A/P
GATING/TRIGGER		NEX	1.0
Auto Trigger Type	Off	# of Acq. Before Pause	0
FMRI		Phase FOV	1.00
PSD Trigger	Internal	Auto Shim	Auto
Slice Order	Interleaved	Phase Correction	No
View Order	Bottom/Up	USER CVS	
# of Repetitions REST	0	User CV2	240.00
# of Repetitions ACTIVE	0	User CV13	1.00
SAT		TR Min	0.0
Tag Type	None	TR Max	0.0
TRICKS		MULTI-PHASE	
Pause On/Off	On	Seperate Series	0
Auto Subtract	0	Mask Phase	0
Auto SCIC	Off	Mask Pause	0
		DIFFUSION	
		Recon All Images	On
		CONTRAST	
		Contrast Yes/No	No

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PATIENT POSITION		IMAGING PARAMETERS	
Patient Entry	Head First	Imaging Mode	2D
Patient Position	Supine	Pulse Sequence	FSE-XL
Coil Configuration	HD 8Ch High Res Brain Array by Invivo	Imaging Options	FC, EDR, TRF, Fast, MRF
Plane	OBLIQUE	SCAN RANGE	
Series Description	Ax T1 FSE	FOV	24.0
SCAN TIMING		Slice Thickness	5.0
Flip Angle	160	Slice Spacing	1.0
TE	Min Full	ACQ TIMING	
Number of Echoes	1	Freq	288
TR	445.0	Phase	192
Echo Train Length	2	Freq DIR	A/P
Receiver Bandwidth	31.25	Fat Shift DIR	Normal (A)
IMAGE ENHANCE		NEX	1.00
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	Flow Direction Compensation	Slice
Slice Order	Interleaved	USER CVS	
View Order	Bottom/Up	TR Min	350.0
# of Repetitions REST	0	TR Max	750.0
# of Repetitions ACTIVE	0	MULTI-PHASE	
SAT		Seperate Series	0
SAT Location	I	Mask Phase	0
Tag Type	None	Mask Pause	0
TRICKS		DIFFUSION	
Pause On/Off	On	Recon All Images	On
Auto Subtract	0	CONTRAST	
Auto SCIC	2	Contrast Yes/No	No

Ax T1 FSE

Ax T1 FSE