

;clmlevprtp

;avance-version
;homonuclear Hartman-Hahn transfer using MLEV17 sequence
; for mixing
;using two power levels for excitation and spinlock
;phase sensitive using TPPI
;A. Bax & D.G. Davis, J. Magn. Reson. 65, 355-360 (1985)
;"clean-TOCSY" - sequence
;C. Griesinger, G. Otting, K. Wuethrich & R.R. Ernst,
; J. Am. Chem. Soc. 110, 7870 (1988)
; Parameter values...jSnyder...02-Mar-01 for DRX-400

"p5=p6*.667"

"p7=p6*2"

"d0=3u"

"d11=30m"

"d12=20u"

"d13=3u"

1 ze
2 d11
3m
3 d12 pl9:f1
d1 cw:f1 ph29
d13 do:f1
d12 pl1:f1
p1 ph1
d0
d12 pl10:f1
(p17 ph26)
4 (p6 ph22 d20 p7 ph23 d20 p6 ph22)
(p6 ph24 d20 p7 ph25 d20 p6 ph24)
(p6 ph24 d20 p7 ph25 d20 p6 ph24)
(p6 ph22 d20 p7 ph23 d20 p6 ph22)
(p6 ph24 d20 p7 ph25 d20 p6 ph24)
(p6 ph24 d20 p7 ph25 d20 p6 ph24)
(p6 ph22 d20 p7 ph23 d20 p6 ph22)
(p6 ph22 d20 p7 ph23 d20 p6 ph22)
(p6 ph24 d20 p7 ph25 d20 p6 ph24)
(p6 ph22 d20 p7 ph23 d20 p6 ph22)
(p6 ph22 d20 p7 ph23 d20 p6 ph22)
(p6 ph24 d20 p7 ph25 d20 p6 ph24)
(p6 ph22 d20 p7 ph23 d20 p6 ph22)
(p6 ph24 d20 p7 ph25 d20 p6 ph24)
(p6 ph24 d20 p7 ph25 d20 p6 ph24)
(p5 ph23)
lo to 4 times l1
go=2 ph31

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d11 wr #0 if #0 id0 ip1 zd
3m ip29
lo to 3 times td1
exit

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ph1=0 2 2 0 1 3 3 1
ph22=3 1 3 1 0 2 0 2
ph23=0 2 0 2 1 3 1 3
ph24=1 3 1 3 2 0 2 0
ph25=2 0 2 0 3 1 3 1
ph26=0 2 0 2 1 3 1 3
ph29=0
ph31=0 2 2 0 1 3 3 1

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;p11 : f1 channel - power level for pulse (default)          [ -3 dB ]
;p19  : f1 channel - power level for presaturation           [ 55 dB ]
;p110: f1 channel - power level for TOCSY-spinlock          [ 9 dB ] 100 to 120usec 360 pulse
;p1   : f1 channel - 90 degree high power pulse
;p5   : f1 channel - 60 degree low power pulse
;p6   : f1 channel - 90 degree low power pulse              [25 to 30usec ]
;p7   : f1 channel - 180 degree low power pulse
;p17: f1 channel - trim pulse                                [2.5 msec]
;d0   : incremented delay (2D)                               [3 usec]
;d1   : relaxation delay; 1-5 * T1
;d11: delay for disk I/O                                     [30 msec]
;d12: delay for power switching                             [20 usec]
;d13: short delay                                           [3 usec]
;d20: delay to allow compensation of NOE and ROE
;      in theory d20 = p6, in practice d20 = 2.6 * p6
;l1: loop for MLEV cycle:
;      ((p6*64 + d20*32 + p5) * l1) + (p17*2) = mixing time
;in0: 1/(2 * SW) = DW
;nd0: 2
;NS: 8 * n
;DS: 16
;td1: number of experiments
;MC2: TPPI

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Look at filename:  A_pr-TOCSY in Franklin directory
expno 1 = 1D
expno 10 = 2D

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