

Bruker Pulse Program Two-Character Code Definitions

For Bruker pulse programs the first characters (usually 4, but at a maximum 6) specify the type of experiment, e.g. **DEPT**, **COSY**, **NOESY** etc.. Further properties of the pulse program are indicated by a two-character code, which is added to the name in alphabetical order. For 2-D experiments the default version is "absolute value" and "without dummy scans". H- or X-decoupling is assumed to be default for heteronuclear experiments, but not for homonuclear ones (with the exception of **inad**). In case of redundant information some two-character codes may be omitted.

The two-character codes used are the following:

bi	with bird pulse for homonuclear J-decoupling
bp	bipolar gradients
cp	with composite pulse
ct	constant time
cw	decoupling using cw command
dc	decoupling using cpd command
df	double quantum filter
di	with DIPSI mixing sequence
dh	homonuclear decoupling in indirect dimension
dw	decoupling using cpd command only during wet sequence
dq	double quantum coherence
ea	phase sensitive using Echo/Anti-echo method
ed	with multiplicity ed iting
et	phase sensitive using Echo/Anti-echo-TPPI method
fb	using f2 - and f3 - channel
fd	using f1 - and f3 - channel (for presaturation)
fr	with presaturation using a f requency list
ft	using f1 -, f2 - and f3 - channel (for presaturation)
fh	F-19 observe with H-1 decoupling
fp	a flip-back pulse
fl	for F-19 decoupler
f2	using f2 - channel (for presaturation)
f3	using f3 - instead of f2 - channel
f4	using f4 - instead of f2 - channel
gd	gated decoupling using cpd command
ge	gradient echo experiment
gp	coherence selection using gradients with ":gp" syntax
gr	coherence selection using g radients
gs	coherence selection using shaped gradients
hc	homodecoupling of a region using a cpd-sequence
hd	homodecoupling
hf	H-1 observe with F-19 decoupling
hs	with homo spoil pulse
ig	inverse gated
ii	using inverse (invi/HSQC) sequence
im	with incremented mixing time
i4	inverse (inv4/HMQC) sequence
jd	homonuclear J-decoupled
jr	with jump-return pulse
lp	with low-pass J-filter
lq	with Q-switching (low Q)
lr	for long-range couplings
mf	multiple quantum filter

ml	with MLEV mixing sequence
nd	no decoupling
no	with NOESY mixing sequence
pc	with p resaturation and c omposite pulse
pg	p ower-gated
pl	p reparing a frequency list
pn	with p resaturation using a 1-D NOESY sequence
pr	with p resaturation
ps	with p resaturation using a shaped pulse
qn	for QNP -operation
qs	phase sensitive using qseq -mode
rd	refocused
rl	with r elay transfer
rs	with r adiation damping suppression using gradients
ru	using r adiation damping compensation u nit
rv	with r andom variation
r2	with 2 step relay transfer
r3	with 3 step relay transfer
se	s pin echo experiment
sh	phase sensitive using States et al. method
si	sensitivity i mproved
sm	s imultaneous evolution of X and Y chemical shift
sp	a shaped p ulse
st	phase sensitive using States- TPPI method
sy	s ymmetric sequence
tf	t riple quantum f ilter
tp	phase sensitive using TPPI
tr	using TROSY sequence
ul	using a frequency list
us	updating shapes
wg	watergate using a soft-hard-soft sequence
w5	watergate using W5 pulse
xf	x -filter experiments
x1	x -filter in F1
x2	x -filter in F2
zf	with z -filter
zq	z ero q uantum coherence
1d	1-D version
1s	using 1 spoil gradients
11	using 1-1 pulse
19	using 3-9-19 pulse
2h	using 2H lockswitch unit
2s	using 2 spoil gradients
3d	3-D sequence
3s	using 3 spoil gradients
30	using a 30 degree flip angle
45	using a 45 degree flip angle
90	using a 90 degree flip angle
135	using a 135 degree flip angle

A phase-sensitive (**TPPI**) **NOESY** experiment with presaturation would then be: **noesy + pr + tp = noesyprtp**.