

**Reference Table: RD Projection NMR Nomenclature (May 2007)**

<b>Research Group</b>	<b>Projection/Accordion NMR experiments</b>	<b>Equivalent RD NMR experiment(s)</b>
<b>Marion and co-workers</b>	<b>1. 2D MQ Triple resonance experiments<sup>1</sup></b> i. 2D MQ-HNCO ii. 2D MQ-HNCA	<b>1. A set of RD NMR experiments</b> i. 2D RD <u>HNCO</u> ii. 2D RD <u>HNCA</u> <sup>2</sup>
	<b>2. 2D Triple resonance experiments<sup>3</sup></b> i. 2D HNCO ii. 2D HN(CA)CO iii. 2D HNCA iv. 2D HN(CO)CA v. 2D HN(COCA)H vi. 2D H(N)COCA vii. 2D HN(CA)H	<b>2. A set of RD- NMR experiments</b> i. 2D RD <u>HNNCO</u> ii. 2D RD <u>HNN(CA)CO</u> iii. 2D RD <u>HNNCA</u> <sup>2</sup> iv. 2D RD <u>HNN(CO)CA</u> v. 2D RD <u>HNN(COCA)HA</u> vi. 2D RD <u>HN(N)COCA</u> vii. 2D RD <u>HNN(CA)HA</u>
<b>Rüterjans and co-workers</b>	<b>3D Triple resonance experiment<sup>4</sup></b> 5D HCACOCANH	<b>A Double RD NMR experiment</b> 3D RD { <u>HCA</u> } { <u>CO(CA)N</u> }HN <sup>a</sup>
<b>Gronenborn and co-workers</b>	<b>Experiments involving accordion principle<sup>5</sup></b> i. 2D HN(CO)CACB ii. 2D HN(COCA)CACB iii. 2D HN(CO)CAHA iv. 2D HN(COCA)CAHA	<b>A set of Double RD NMR experiments Using States-TPPI<sup>6</sup></b> i. 2D RD-H <u>NN(CO)CACB</u> ii. 2D RD-H <u>NN(COCA)CACB</u> iii. 2D RD-H <u>NN(CO)CAHA</u> iv. 2D RD-H <u>NN(COCA)CAHA</u>
<b>Kupce and Freeman</b>	<b>3D experiments with titled projection<sup>7</sup></b> i. <sup>15</sup> N-TOCSY HSQC ii. <sup>15</sup> N -NOESY HSQC	<b>A set of 2D RD NMR experiments</b> i. 2D RD <u>H</u> -TOCSY- <u>NH</u> ii. 2D RD <u>H</u> -NOESY- <u>NH</u>
<b>Qin and co-workers</b>	<b>Experiments involving correlated accordion principle<sup>8</sup></b> i. HCCH-NOESY ii. HCNH-NOESY iii. HNNH-NOESY iv. HCCH-TOCSY v. HC(CCO)NH vi. H <sup>αβ</sup> C <sup>αβ</sup> (CO)NH vii. H <sup>αβ</sup> C <sup>αβ</sup> NH	<b>A set of RD NMR experiments</b> i. 3D RD [ <u>HC</u> ]-NOESY-[CH] ii. 3D RD [ <u>HC</u> ]-NOESY-[NH] iii. 3D RD [ <u>HN</u> ]-NOESY-[NH] iv. 3D RD <u>HCCH</u> -TOCSY <sup>9</sup> v. 3D RD <u>HC(CO)NH</u> -TOCSY <sup>9</sup> vi. 3D RD <u>H<sup>αβ</sup>C<sup>αβ</sup>(CO)NHN</u> <sup>9,10</sup> vii. 3D RD <u>H<sup>αβ</sup>C<sup>αβ</sup>NHN</u> <sup>9</sup>

<sup>a</sup> Nuclei within parenthesis are jointly sampled in one RD dimension each

## References

1. Simorre, JP, Brutscher, B, Caffrey, MS, Marion, D. *J. Biomol. NMR* 1994; **4**: 325-333.
2. Szyperski, T, Wider, G, Bushweller, JH, Wüthrich, K. *J. Am. Chem. Soc.* 1993; **115**: 9307-9308.
3. Brutscher, B, Simorre, JP., Caffrey, MS, Marion D. *J. Magn. Reson.* 1994; **B105**: 77-82.
4. Löhr, F, Rüterjans, H. *J. Biomol. NMR* 1995; **6**: 189-197.
5. Ding K, Gronenborn, AM. *J. Magn. Reson.* 2002; **156**: 262-268.
6. Szyperski, T, Braun, D, Fernandez, C, Bartels, C. and Wüthrich, K. *J. Magn. Reson.* 1995; **B108**: 197-203.
7. Kupce, E, Freeman, R. *J. Magn. Reson.* 2005; **172**: 329-332.
8. Ding, K, Ithychanda S, Qin, J. *J. Magn. Reson.* 2006; **180**: 203-209.
9. Szyperski, T, Yeh, DC, Sukumaran, DK, Moseley, HNB, and Montelione, GT. *Proc. Natl. Acad. Sci. USA* 2002; **99**: 8009-8014.
10. Szyperski, T, Pellecchia, M, Wüthrich, K. *J. Magn. Reson.* 1994; **B105**: 188-191.