

2D-ROESY (Rotating Frame Overhauser Effect Spectroscopy)

- For Intermediate Size Molecules (~2000 Da), the NOE Passes Through Zero
- ROESY is Just Like NOESY, Except All Crosspeaks are Negative, Regardless of Molecular Size
- Mixing Uses a Spin-Lock, Similar to TOCSY
 - This Spin-Lock Uses Lower Power and One Continuous Long Pulse: 3,000 Hz (ROESY) vs. 8,333 Hz (TOCSY).
- Easy to Set Up and Reliable on Modern NMR Instruments
- Mixing Time Required is One-Half of NOESY
- Transfer of Magnetization Occurs in the x - y Plane, via the NOE
- TOCSY Artifacts (Positive) Can Interfere, Especially Near the Anti-Diagonal