

Relative Quantification using NMR spectroscopy

Fast Insights. Confident Decisions. One Measurement.

Relative NMR quantification determines **ratios** of components in your sample by comparing integrated peak areas – **no exact concentration, calibration curve, or internal standard required**. This makes it ideal for polymers, complex mixtures, and process control where *relationships* matter more than absolute amounts.

Why Relative Quantification?

- ✓ Understand your material at a glance
- ✓ Detect process deviations early
- ✓ Support R&D, production, and quality assurance with one fast workflow

What You Can Achieve

✓ Polymer Substitution Analysis

Determine substitution rates, branching, and batch-to-batch consistency of polymeric or polysaccharide materials. Ideal for routine comparison, product release, and formulation development.

✓ Intramolecular Ratio Determination

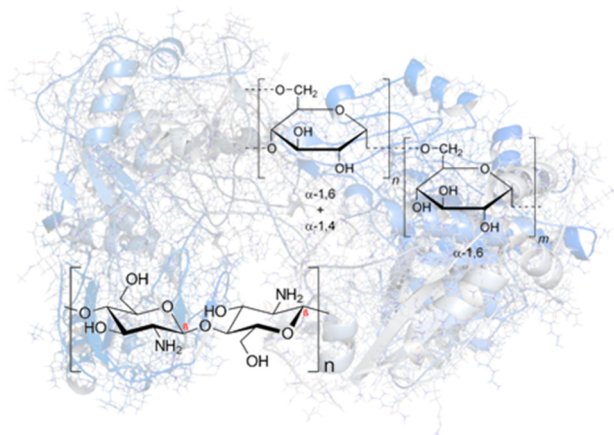
Track structural features within a molecule: e.g., cis/trans ratios, regioisomers, or conformer distributions, substitutions rates, without the need for reference standards.

✓ Impurity Profiling or Stability Monitoring

Quantify impurities relative to your main component, even in complex matrices. Perfect for monitoring synthesis pathways and side reactions.

✓ Formulation & Stability Monitoring

Detect formulation changes over time by tracking ratio shifts between excipients, active ingredients, and degradation products.



Your Advantages at Our Laboratory

- ➔ One rapid, non-destructive NMR experiment
- ➔ No internal standard required
- ➔ Universal across synthetic, biological, and polymeric materials

- ➔ Reproducible & robust, suitable for R&D and regulated environments
- ➔ GMP & GLP Certified Laboratory / FDA approved
- ➔ Over 35 years of expertise in complex matrices and peptide analysis