

Labeled Ubiquitin Protein Standards

ISOTECH® Stable Isotopes now offers high quality human Ubiquitin in a wide range of labeling patterns. Ubiquitin is a highly conserved, eukaryotic protein which contains 76 amino acid residues and features rich secondary and tertiary structure. Labeled Ubiquitin serves as a valuable tool for NMR research for a variety of applications such as:

- Development of novel labeling and/or analytical methodology^{1,2}
- Understanding molecular motion by Solid-State NMR³
- NMR instrumentation and probe performance verification

Ubiquitin Listings

Cat. No.	Labeling Pattern	Isotopic Purity	Available Sizes
709409	¹⁵ N	98 atom % ¹⁵ N	5mg, 10mg
709441	¹⁵ N, D	98 atom % ¹⁵ N 97 atom % D	5mg, 10mg
709468	¹³ C, ¹⁵ N	99 atom % ¹³ C 98 atom % ¹⁵ N	5mg, 10mg
709395	¹³ C, ¹⁵ N, D	99 atom % ¹³ C 98 atom % ¹⁵ N 97 atom % D	5mg, 10mg
709417	unlabeled	NA	5mg, 10mg

To ensure quality, each batch is analyzed by:

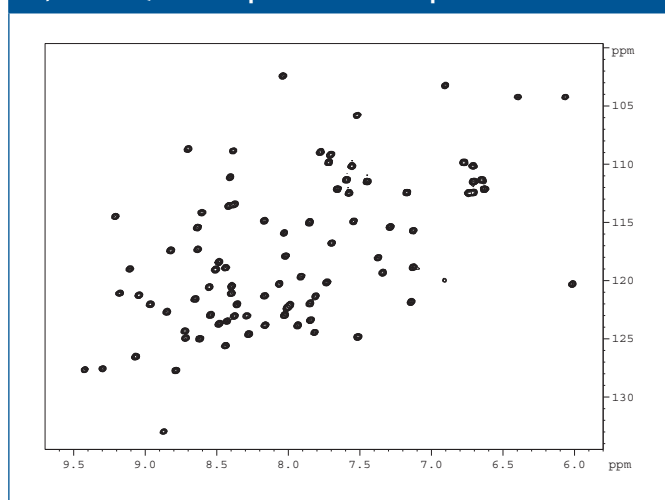
- Mass Spectrometry
- SDS-PAGE
- NMR

References:

1. Sheppard D, Li DW, Bruschweiler R, Tugarinov V. *J Am Chem Soc.* **2009**, *131* (43),15853-65.
2. Wickramasinghe N, Parthasarathy S, Jones C R, Bhardwaj C, Long F, Kotecha M, Mehboob S, Fung L, Past J, Samoson A, Ishii Y, *Nature Methods* **2009**, *6*, 215 – 218.
3. Schneider R, Seidel K, Etzkorn M, Lange A, Becker S, Baldus M, *J Am Chem Soc.* **2010**, *132* (1), 223-233.

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¹H, ¹⁵N-HSQC NMR Spectrum of Ubiquitin-¹⁵N



Data acquired on a Bruker 900 MHz instrument and was generously provided by Dr. Jun Qin, Department of Molecular Cardiology, Cleveland Clinic, Cleveland, Ohio.

Our Labeled Ubiquitin does not include a His-tag and is supplied as a lyophilized powder.

We are also happy to provide as a solution sealed in an NMR tube per your specifications.

Please contact us for additional information:

Stable Isotopes Technical Service

Phone: (937) 859-1808

(800) 448-9760 (US and Canada)

Fax: (937) 859-4878

Email: isosales@sial.com