



CORPORATE INQUIRIES TO:

Karen Miller
Karen.Miller@sial.com

MEDIA INQUIRIES TO:

Mitzi Rettinger, 512/310-5105
mitzi_rettinger@cerilliant.com

**Cerilliant Introduces Snap-N-Spike[®] | Snap-N-Shoot[®]
Certified Reference Materials for *Cannabis* Testing Applications**

SAINT LOUIS, MO – December 2, 2014 - Sigma-Aldrich Corporation (NASDAQ: SIAL) is pleased to announce that the Cerilliant[®] brand within its Applied Diagnostics and Testing business segment has introduced new solution-based Certified Reference Materials (CRMs) of seven *Cannabis* biomarkers – cannabidiol (CBD), cannabigerol (CBG), cannabigerolic acid (CBGA), cannabichromene (CBC), cannabidiolic acid (CBDA), delta9-tetrahydrocannabinolic acid A (THCA-A), and tetrahydrocannabinol (THC). These cannabinoid CRMs are suitable for use in *Cannabis* testing applications by GC, GC/MS, HPLC, or LC-MS/MS, including potency testing, cannabinoid and impurity profiling, pharmaceutical research, or forensic analysis.

A growing body of research suggests that cannabinoids may offer therapeutic efficacy in the treatment of many ailments from arthritis, glaucoma and chronic pain to malnutrition, multiple sclerosis, epilepsy, and cancer.¹⁻³ Therapeutic effects are highly dependent on the strain of *Cannabis*, since each strain contains various quantities of different cannabinoids such as delta9-tetrahydrocannabinol (THC) or cannabidiol (CBD).⁴⁻⁶ Terpenes and other chemical constituents of *Cannabis* for medicinal use may further impact therapeutic efficacy through synergies with the targeted cannabinoids.⁷

The pharmacological and regulatory complexities involving *Cannabis* necessitates analytical testing of quality and potency to guarantee consumer safety in regions where its sale is legal for medicinal use. In the U.S., for example, the state of Colorado requires *Cannabis* retailers to provide a cannabinoid potency profile for *Cannabis*-derived products.⁸ Canada defines production controls by strain that *Cannabis* growers must follow for cannabinoid profiling, cultivating, processing, quality control testing, and packaging.⁹

Cerilliant provides these and other certified solution standards of cannabinoids in a U.S. DEA and Health Canada (with TK #'s) exempt solution format, allowing laboratories to place orders without additional regulatory paperwork. Cerilliant's cannabinoid solution CRMs are manufactured and certified to the highest industry standards including ISO Guide 34, ISO/IEC 17025, and ISO 13485. Each certified reference standard produced by Cerilliant includes a comprehensive Certificate of Analysis (COA) containing uncertainty and traceability information in accordance with ISO guidelines and for satisfaction of laboratory regulatory requirements.

About Cerilliant: Cerilliant Corporation, located in Round Rock, Texas, is a global leader in providing certified reference standards for critical applications. The company has been providing certified reference materials for over 30 years. Cerilliant offers more than 3,000 catalog products and a full range of custom products and services that address the stringent and complex requirements of the pharmaceutical, clinical diagnostic, clinical/forensic toxicology, and natural products industries. Cerilliant sustains a modern, robust quality system, which incorporates cGMP, GLP, and ISO requirements. The company is accredited to ISO Guide 34 and ISO/IEC 17025, certified to ISO 13485 and ISO 9001:2008, and is compliant with ISO 17511 and ISO 15194. Cerilliant Corporation is a subsidiary of Sigma-Aldrich. For more information about Cerilliant, please visit www.cerilliant.com.

About Sigma-Aldrich: Sigma-Aldrich, a leading Life Science and High Technology company focused on enhancing human health and safety, manufactures and distributes more than 200,000 chemicals, biochemicals and other essential products to more than 1.4 million customers globally in research and applied labs as well as in industrial and commercial markets. With three distinct business units – Research, Applied and SAFC Commercial – Sigma-Aldrich is committed to enabling science to improve the quality of life. The Company operates in 37 countries, has more than 9,000 employees worldwide, and had sales of \$2.7 billion in 2013. For more information about Sigma-Aldrich, please visit its website at www.sigma-aldrich.com.

Sigma-Aldrich, Cerilliant, Snap-N-Spike, and Snap-N-Shoot are registered trademarks of Sigma-Aldrich Co. LLC or an affiliated company.

1. Ben Amar M (2006) *J. Ethnopharmacol.* 105:1-25
2. Armentano P, Carter G, Sulak D, Goldstein ET. Emerging Clinical Applications For *Cannabis* and Cannabinoids: A Review of the Recent Scientific Literature. Sixth Edition. 2014
3. <http://www.drugabuse.gov/publications/drugfacts/marijuana-medicine>
4. Brunt TM, van Genugten M, Höner-Snoeken K, van de Velde MJ, Niesink RJ (2014) *J. Clin. Psychopharmacol.* 34(3):344-9
5. <http://www.harborsidehealthcenter.com/learn/CBD-rich-medicine.html>
6. <http://www.cnn.com/id/40554297/>
7. Russo EB (2011) *Br. J. Pharmacol.* 163:1344-1364
8. <http://www.sos.state.co.us/CCR/GenerateRulePdf.do?ruleVersionId=5890&fileName=1%20CCR%20212-2>
9. <http://www.hc-sc.gc.ca/dhp-mps/marihuana/about-apos/dried-information-sechee-eng.php>