



SureSelect XT CD Medicinal Genomics StrainSEEK Panel

Innovation powered by you

Advantages of the Design

- A comprehensive pan-cannabis NGS panel covering 5,967 genes, 300,000 to 500,000 SNPs
- Designed using the Jamaican Lion cannabis reference genome
- Offers full coverage of THCA, CBDA and CBCA synthase genes
- Provides information on flowering, disease resistance, and pathogen resistance genes
- Enables high library complexity for rare allele detection
- Compatible with Illumina NGS systems



Kevin McKernan
Chief Scientific Officer and Founder
Medicinal Genomics

"Thanks to SureSelect, we designed a panel that identifies high-impact variants in genes of interest to accelerate cannabis and hemp breeding programs. The platform consistently delivers high-quality data that our team trusts."

Targeted Next-Generation Sequencing for Cannabis Genotyping

Agilent Community Designs for NGS are targeted sequencing panels established by, or in collaboration with, subject matter experts in different research fields. These NGS designs are available as custom, made-to-order panels that provide you with robust and cost-effective sequencing results that focus only on your genomic regions of interest.

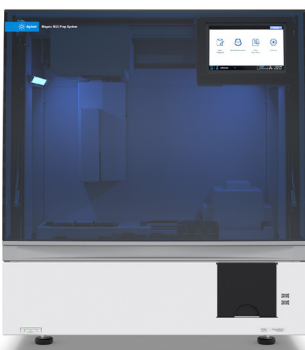
The Agilent SureSelect XT CD Medicinal Genomics StrainSEEK panel was developed using a pan-genome approach by Medicinal Genomics, a company with expertise in cannabis genetic analysis. The design is a comprehensive and powerful panel that enables discoveries of quantitative traits and expands the diversity of cannabis and hemp cultivars through genetic prediction.

Expertise in cannabis science, education and safety through genetics

The panel was developed by Kevin McKernan, Chief Scientific Officer, Medicinal Genomics. Medicinal Genomics is located in Beverly, Massachusetts.

Agilent NGS Solutions

To analyze samples prepared with the Medicinal Genomics StrainSEEK panel, Agilent offers an NGS workflow, including systems for automated library preparation and target enrichment, instruments for sample quality control, and accompanying reagents. With proven technologies from Agilent, let us help you confidently implement genetic insights to progress discoveries and decisions in your laboratory every day.



Agilent Magnis
NGS Prep system



Agilent 4150
TapeStation system

Additional Insights with Kannapedia, the Library of Cannabis Genetics

Add meaning to your cannabis research by analyzing genomic data with the Medicinal Genomics bioinformatics pipeline. Your data file will be mapped to the Jamaican Lion reference, and you will receive a Kannapedia.net report, which includes:

- Tables showing the most genetically similar and dissimilar cultivars in the Kannapedia database
- Blockchain Digital Stamp Certificate for strain registration and to establish prior art
- High- and medium-impact variants in cannabinoid synthase genes (THCA, CBDA, CBCA)
- High- and medium-impact variants in 50 curated genes of interest (flowering, disease resistance, pathogen resistance, and more)
- Plant type determination (Type I-V)
- Heterozygosity
- Genetic sex markers, and more

For more information about SureSelect XT CD Medicinal Genomics StrainSEEK informatics, please contact ngspm@agilent.com

This bioinformatics pipeline is a product of Medicinal Genomics and is not supported by Agilent Technologies.

Order Information

Product	Part Number
SureSelect XT CD Medicinal Genomics StrainSEEK, 16	5280-0001
SureSelect XT CD Medicinal Genomics StrainSEEK, 96	5280-0002
SureSelect XT CD Medicinal Genomics StrainSEEK, 96A	5280-0003



Agilent products and solutions are intended to be used for cannabis quality control and safety testing in laboratories where such use is permitted under state/country law.

Community designs are distributed but not validated by Agilent.

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PR7000-3142

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© Agilent Technologies, Inc. 2022
Published in the USA, February 1, 2022
5994-4476EN

