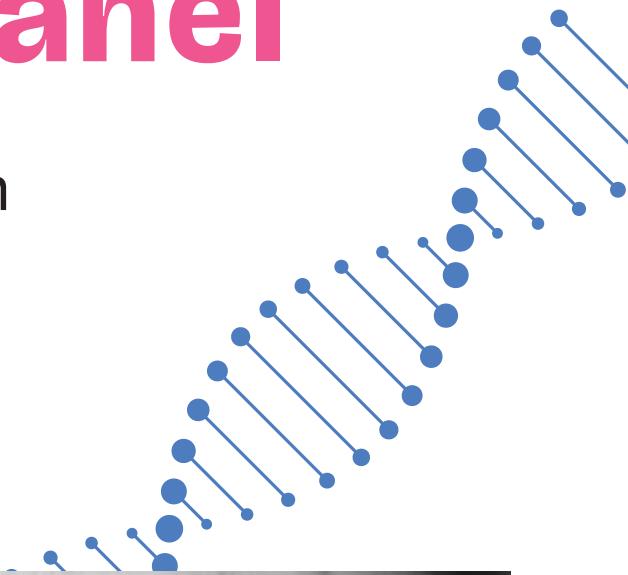




# Glaucoma Panel

Protecting Vision Through  
Precision Genetics



**RUO**

# Uncovering Genetics of The Silent Vision Threat

Glaucoma is a group of neurodegenerative eye diseases that damage the optic nerve, usually due to a gradual rise in intraocular pressure. When eye fluid fails to drain properly, pressure builds up, leading to irreversible vision loss. Affecting nearly 100 million people worldwide, glaucoma is among the leading causes of permanent blindness.



A major challenge is its silent progression, nearly 70–90% of glaucoma cases in India remain undiagnosed, as symptoms appear only after significant visual-field loss (Business Standard, 2024; India Today, 2025). In India, the burden is substantial, with more than 12 million people currently affected by glaucoma (India Today, 2025). Glaucoma also accounts for approximately 12–13% of total blindness in the country (Business Standard, 2024). The prevalence among adults aged  $\geq 40$  years remains between 2.7% and 4.3%, emphasizing the need for early detection and routine eye examinations (Indian Journal of Ophthalmology, 2023).

Inherited forms like Primary Congenital Glaucoma (PCG) and Juvenile Open-Angle Glaucoma (JOAG) heighten the risk, especially in families with a history of the disease. Since glaucoma affects millions of people worldwide, identifying genetic predisposition early is essential for timely diagnosis, intervention, and personalized management.

## Why Genetic Testing Changes Everything

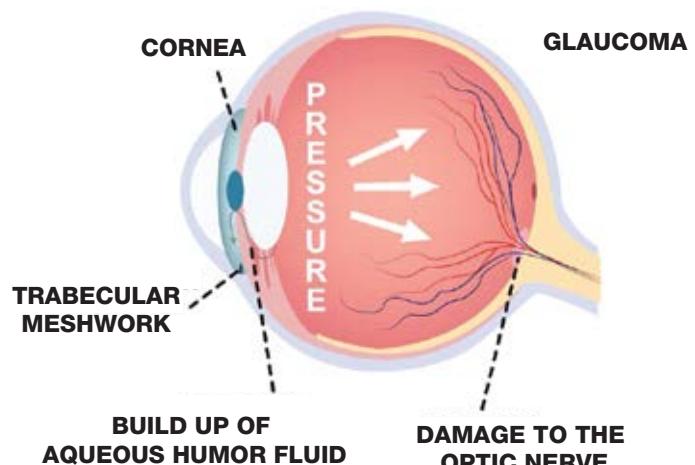
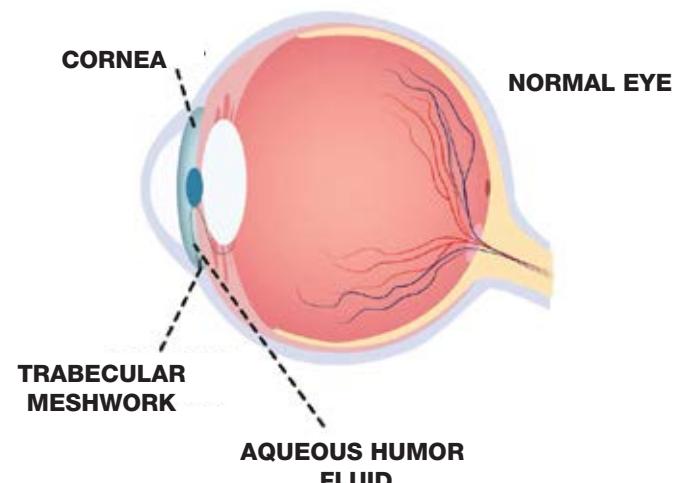
Traditional diagnosis relies on clinical assessment, eye pressure measurement, and imaging techniques. While essential, these methods cannot detect underlying genetic causes or identify high-risk individuals before symptoms appear. This is where precision genetics bridges the critical gap, enabling early detection, accurate prognosis, and personalized care strategies that can preserve vision before irreversible damage occurs.

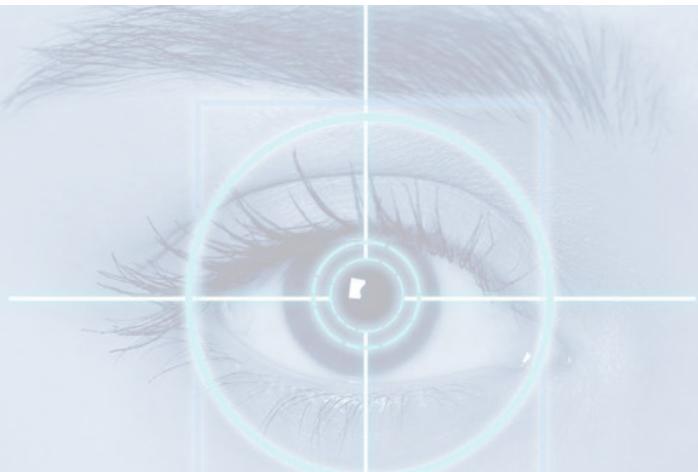
## The Uncoded Glaucoma Panel

The Uncoded Glaucoma Panel addresses critical diagnostic gaps through a robust, targeted NGS assay that delivers high sensitivity, deep coverage, and precise variant detection across **21 clinically significant genes**. This enables the early identification of genetic risk factors, supports accurate prognosis, and improves clinical stratification.

By integrating advanced genomic insights into routine care, eyecare professionals can detect risk earlier, strengthen preventive strategies, and protect vision before irreversible damage occurs.

Because with glaucoma, what remains unseen can cause the greatest harm - unless you look deeper.





## Key Features

### Exceptional Performance & Reliable Chemistry

- Provides comprehensive genomic analysis with 300–500x coverage and >95% on-target rate.
- Enables precise genomic analysis for accurate detection of SNVs, INDELs and CNVs.

### End-to-End Solution

- Expert technical assistance provided across the entire workflow—from library preparation to data interpretation.

### Compatible with all Illumina platforms



iSeq 100



MiniSeq



MiSeq



MiSeq i100 Series



NextSeq

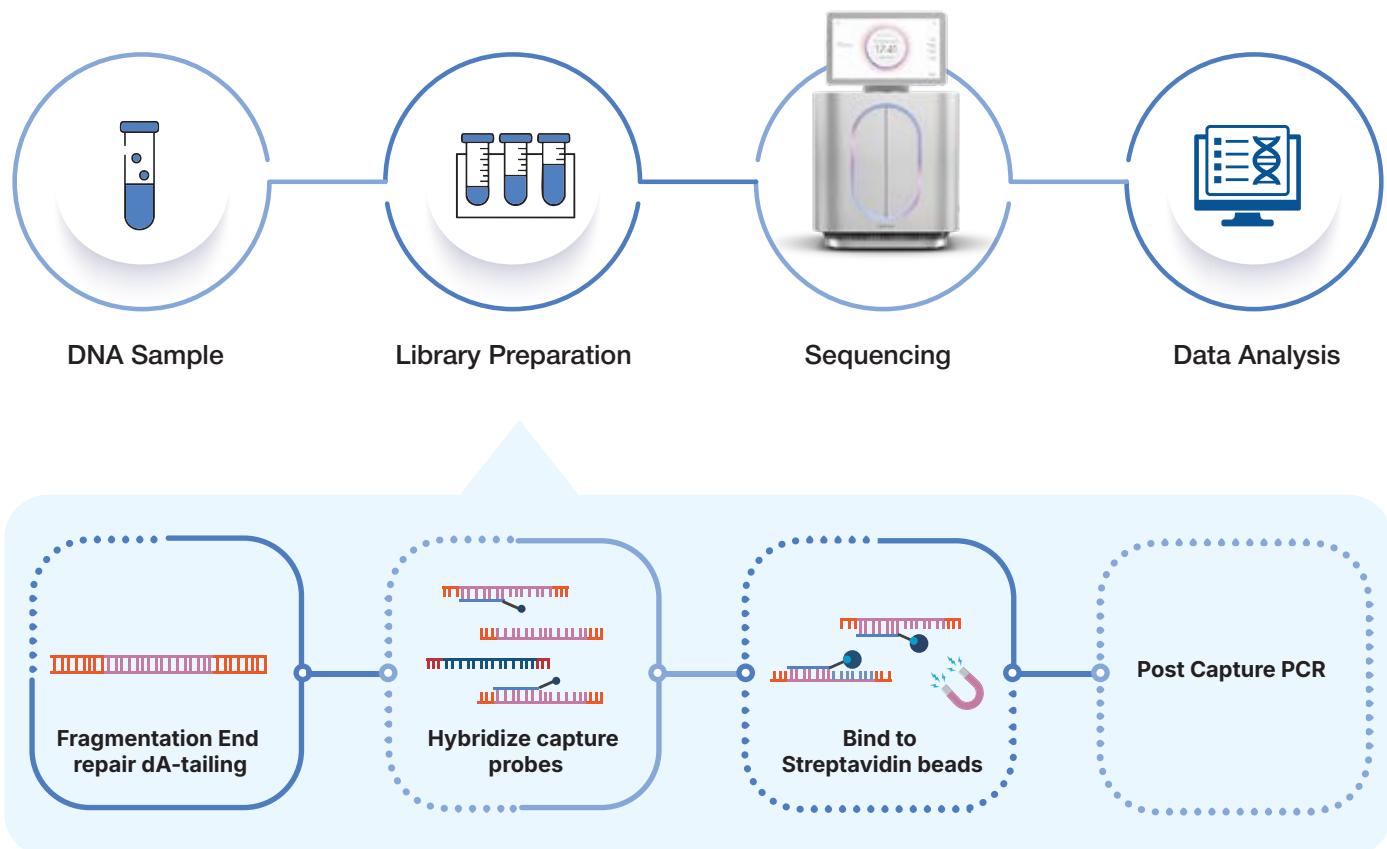
### Extensive Gene Coverage

- Sample Type: Blood
- Input DNA Requirement: 50 ng gDNA
- Panel Size: 171 Kb
- Reference Genome: Hg38
- Total Genes: 21 [Exon (CDS+UTR) and promoter region upto ~200bp]

### Glaucoma Panel Gene List

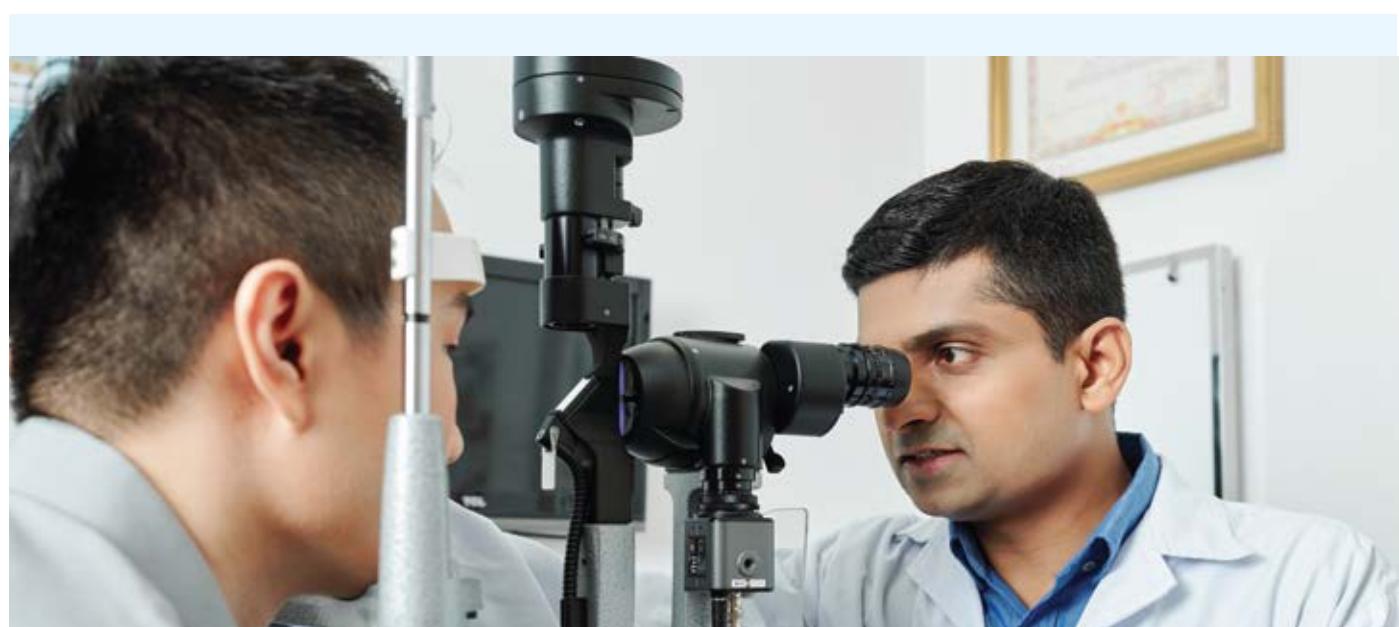
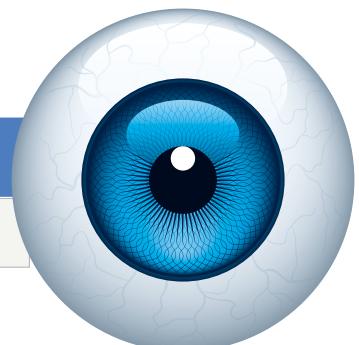
|         |        |
|---------|--------|
| CHRDL1  | OLFM2  |
| CNTNAP2 | OPA1   |
| CPAMD8  | OPTN   |
| CYP1B1  | PAX6   |
| EMP1    | PITX2  |
| FOXC1   | SRFBP1 |
| FOXE3   | TBK1   |
| LMX1B   | TEK    |
| LOXL1   | TYR    |
| LTBP2   | WDR36  |
| MYOC    |        |

## Workflow



## Ordering Information

| Cat. No. | Product Name   | Reactions |
|----------|----------------|-----------|
| 14513    | Glaucoma Panel | 24        |



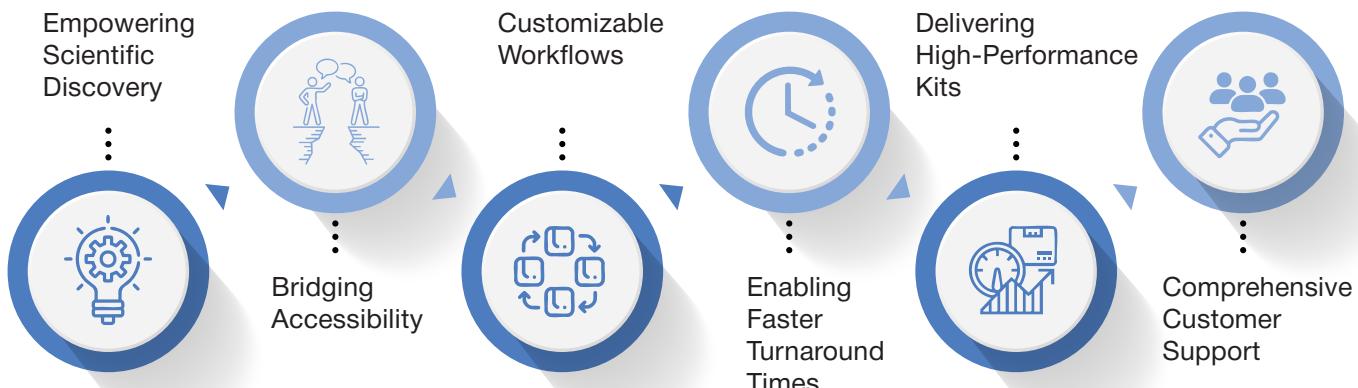
## DECODING MULTI-OMICS WITH UNCODED BY PREMAS LIFE SCIENCES

At the intersection of science and innovation stands **Uncoded** – an in-house brand by **Premas Life Sciences**, created to democratize access to high-quality multi-omics solutions, Made in India, for the world.

With over 19 years of legacy and 900+ years of cumulative team expertise, Premas Life Sciences has long been a trusted name in enabling genomics, proteomics, cell biology, biopharma, agriculture, and healthcare breakthroughs in India. **Uncoded** is the natural evolution of this mission—crafted to empower every lab, every clinician, every researcher with tools that are reliable, cost-effective, and future-ready.

**Uncoded** is not just a product line it's a movement. A Make in India initiative to advance life sciences through high-quality, globally aligned NGS tools and multi-omics platforms made by scientists, for scientists.

### WHAT WE STAND FOR



Uncoded is more than a product line. It is a movement - **driven by purpose, powered by science**.

### OUR PARENT LEGACY – PREMAS LIFE SCIENCES

Founded in **2005**, **Premas Life Sciences Pvt. Ltd.** has been at the forefront of bringing cutting-edge technologies to India, empowering scientists, clinicians, and researchers with world-class solutions. Founded by passionate scientists and industry experts, we embarked on a mission to bridge the gap between technology and innovation. Today, we proudly stand as a trusted partner in advancing scientific discovery and translational research in India.

At Premas Life Sciences, we partner with the world's most innovative technology providers to equip Indian researchers with the latest advancements in genomics, proteomics, and multi-omics. Our collaborations with **Illumina, Olink, Covaris, Cytek, Horiba, Sphere Bio** and **Bruker Spatial Biology** ensure that cutting-edge tools are accessible to the Indian scientific community.





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