

# BOSTON HEART LipidSeq Panel

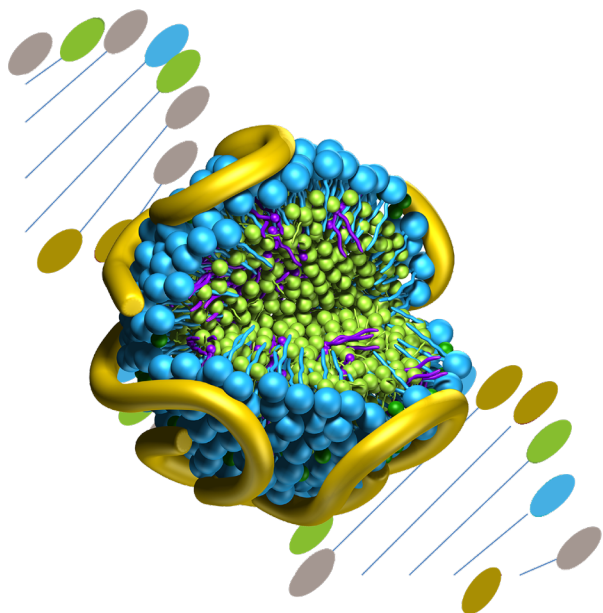
The Boston Heart LipidSeq test is a complete **23-gene sequencing panel** aimed at identifying the genetic cause for specific lipid and lipoprotein disorders, which can be associated with premature cardiovascular disease, pancreatitis, kidney disease, or neurologic disease.

Boston Heart takes our advanced test portfolio one step further by offering this next generation sequencing panel for select patients who may have uncommon defects in genes controlling lipid and lipoprotein metabolism.

## A PATIENT MAY FLAG FOR AN EXTREMELY ABNORMAL LIPID VALUE DURING TESTING.

We use your patients' Boston Heart test results to identify which of them may have a genetic condition impacting their lipid or lipoprotein metabolism.

If there is a genetic basis for the patient's abnormal value, understanding the specific defect(s) and the associated disease(s) can help guide treatment considerations, educate the patient about their risk, and encourage family members to seek testing to determine if they too are at risk.



**50%**  
of Boston Heart  
patients

with markedly abnormal lipids  
have a genetic cause, after  
ruling out secondary causes.

## BIOCHEMICAL ABNORMALITIES

LipidSeq evaluates six major categories of biochemical abnormalities, each associated with several genetic disorders.

1. Hypercholesterolemia--where direct LDL-C is  $\geq 190$  mg/dL.
2. Elevated Sterols--disorders of sterol metabolism where  $\beta$ -sitosterol is  $\geq 10$  mg/L or cholestanol is  $\geq 10$  mg/L.
3. Hypertriglyceridemia--where fasting triglyceride values are  $\geq 500$  mg/dL.
4. HDL Deficiency--where HDL-C is  $< 25$  mg/dL if male and  $< 30$  mg/dL if female.
5. Hypocholesterolemia--where direct LDL-C is  $< 10$  mg/dL.
6. HDL Excess--where there is established heart disease and HDL-C is  $\geq 100$  mg/dL if male and  $\geq 120$  mg/dL if female.

For more information, contact your **Area Sales Manager** or Customer Care at **877.425.1252** or [customer care@bostonheartdx.com](mailto:customer care@bostonheartdx.com)

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# GENETIC TESTING TO HELP YOU TREAT MORE EFFECTIVELY

**Some conditions present with similar biochemical findings but can have different clinical prognoses, as well as different treatment therapies.**

The LipidSeq panel is designed to cover most major genes known to cause uncommon lipid and lipoprotein disorders. By identifying a specific condition, you can further personalize your patient's treatment plan.

Biochemical Abnormality	Gene	Associated Conditions <sup>1-11</sup>
Hypercholesterolemia	LDLR, APOB, PCSK9, STAP1, LDLRAP1, LIPA	Familial Hypercholesterolemia (FH), Lysosomal Acid Lipase Deficiency
HDL Deficiency	ABCA1, APOA1, LCAT	Tangier Disease, ApoA-1 Deficiency or variants, Familial LCAT Deficiency, Fish-Eye Deficiency
Elevated Sterols	ABCG5, ABCG8, CYP27A1	Sitosterolemia, Cerebrotendinous Xanthomatosis (CTX)
Hypertriglyceridemia	LPL, APOC2, GPIHBP1, APOA5, APOE	Familial Hypertriglyceridemia, Dysbetalipoproteinemia
Hypocholesterolemia	APOB, MTTP, LIPG	Hypobetalipoproteinemia, Abetalipoproteinemia
HDL Excess	CETP, LIPC, APOC3, SCARB1	CETP Deficiency, Hepatic Lipase Deficiency, APOC3 Deficiency, SCARB1 Deficiency

## ORDERING INFORMATION:

You will receive a letter, along with your patient's lab report, explaining the abnormal value that indicates why that patient meets the clinical criteria to benefit from having the LipidSeq panel performed.

Test Name	Code	The following items are included with the cover letter you receive. To order the LipidSeq panel, both forms must be completed.
LipidSeq	890	<ul style="list-style-type: none"><li>LipidSeq test requisition to be filled out, signed, and sent to Boston Heart with the saliva sample.</li><li>LipidSeq Informed Consent to be signed and filled out at your office.</li></ul>

## PAYMENT INFORMATION:

- This test is not billed to Medicare or 3rd parties.
- Contact your Area Sales Manager for additional information and pricing.

**GENETIC COUNSELING:** Genetic counseling before and/or after testing is optional and available for a fee.

**SPECIMEN REQUIREMENTS:** 2 mL Saliva collected using the LipidSeq specimen kit.

Testing is performed by Eurofins laboratory Clinical Enterprise, 175 Crossing Blvd, Framingham, MA, 01702. CLIA: 22D1083041

## References:

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