

# Quickly profile genes associated with immune response.

The HTG EdgeSeq™ Immune Response Panel was built to measure the gene expression profile of 2,002 mRNAs associated with the body's immune response, in a single extraction-free reaction. Potential applications of the panel include measurement of gene expression associated with the body's immune response throughout disease progression, including response to autoimmune disease and pathogens such as SARS-CoV-2. Like all HTG EdgeSeq Panels, the Immune Response Panel leverages the sensitivity and dynamic range of next-generation sequencing (NGS) to measure gene expression.

The HTG EdgeSeq Immune Response Panel is best suited for use with blood samples; however, it is also compatible with formalin-fixed, paraffin-embedded (FFPE) sample input types. HTG's extraction-free HTG EdgeSeq assays are automated on the HTG EdgeSeq system or available from our VERI/O™ laboratory as a service.

- **Measure 2,002 transcripts in a single well:** obtain a broad profile of genes to characterize immune response due to COVID-19 or other pathogen infection and autoimmune disease
- **Extraction-free chemistry:** simplified sample preparation workflow reduces bias and sample loss compared to extracted RNA
- **Low sample input:** no RNA extraction means less sample is required per well and reduces extraction-associated data bias
- **Simplified data analysis:** analyze results in the HTG EdgeSeq Reveal data suite, not a complicated RNA-Seq pipeline

### Examples of Disorders Targeted by the HTG EdgeSeq Immune Response Panel

Arthritis	Irritable Bowel Disease
Multiple Sclerosis	Vaccination Response
Transplant Rejection	Pathogenic Infection
Allergic Response	

### Examples of Key Pathways Targeted by the HTG EdgeSeq Immune Response Panel

B-cell and T-cell Receptor Signaling	Cytokine Signaling
T-cell Checkpoint Modulation	Cytotoxic Receptors
Inflammasomes	Interferon Signaling
Lymphocyte Trafficking	Vesicle and Endocytosis

## Ordering Information

The HTG EdgeSeq Immune Response Panel is compatible with Illumina and Thermo Fisher Scientific Ion Torrent sequencers.

	Catalog Number	Product Name	
Illumina MiSeq™	916-015-208	HTG EdgeSeq Immune Response Panel	(2x8)
	916-015-008	HTG EdgeSeq Immune Response Panel	(4x8)
	916-015-224	HTG EdgeSeq Immune Response Panel	(1x24)
	916-015-024	HTG EdgeSeq Immune Response Panel	(4x24)
	916-015-096	HTG EdgeSeq Immune Response Panel	(1x96)
Thermo Fisher Scientific Ion S5™	916-015-308	HTG EdgeSeq Immune Response Panel	(2x8)
	916-015-108	HTG EdgeSeq Immune Response Panel	(4x8)
	916-015-324	HTG EdgeSeq Immune Response Panel	(1x24)
	916-015-124	HTG EdgeSeq Immune Response Panel	(4x24)
	916-015-196	HTG EdgeSeq Immune Response Panel	(1x96)

### Sample Requirements

FFPE (formalin-fixed paraffin-embedded)	6.0 mm <sup>2</sup> / well
PAXgene	500 µL

## Partner with HTG

**HTG EdgeSeq System:** HTG offers automated workflow solutions for molecular profiling that can be deployed in your laboratory to help address the unique needs and challenges through every step of your projects.

**VERI/O Laboratory Services:** Support for biomarker research using HTG's extraction-free technology and growing portfolio of profiling assays. Results are provided for retrospective samples and are not for use in diagnostic procedures.

**HTG Qualified Service Providers:** HTG has partnered with several qualified service provider laboratories that can process your samples using HTG EdgeSeq systems and assays. Visit [htgmolecular.com/services/qualified-service-providers](http://htgmolecular.com/services/qualified-service-providers) for a complete list of providers.

## Learn More

The HTG EdgeSeq system has a number of key advantages including multiplexing from tens to thousands of biomarkers in a single sample; very low sample input requirements; simple, extraction-free sample preparation; automated workflow; and simplified data output.

The HTG EdgeSeq system is a powerful solution, providing gene expression profiling results for researchers, laboratory staff, and biomarker leads pursuing discovery, translational medicine, and other oncology applications.

### HTG EdgeSeq Immune Response Panel research applications:

Take a comprehensive look into immune system dysfunction. Evaluate pathways, processes, and cell types involved in response to pathogens.

Discover or validate immune signatures associated with abnormal immune response.

Use the HTG EdgeSeq Reveal software to visualize gene expression to characterize immune response.

### HTG EdgeSeq Immune Response Panel on the HTG EdgeSeq system:

Extraction-free and automated workflow on the HTG EdgeSeq system

One panel provides 2,002 gene expression data points



Learn more at [htgmolecular.com](http://htgmolecular.com)