VibrantWellness

# Viral Infections Panel

## *Key Clinical Messages*

## What is the Viral Infections Panel?

Vibrant's Viral Infections Panel is a blood test that detects IgG and IgM antibodies to six viruses and one bacterium that can be ordered as a blood draw or at-home dried blood spot test. The Virus Infection Panel assesses antibody responses to infections that are commonly associated with numerous health conditions.

This is a stand-alone test for infections. However, this panel is also included with Tickborne 2.0 and Neural Zoomer Plus tests.

## Why Order the Viral Infections Panel?

The Viral Infections Panel provides an in-depth look at the immune response to different viruses and infections. Chronic infections have been associated with chronic disease and other symptoms which can impact multiple body systems and significantly threaten health.

This test can help identify whether the immune system is mounting a response against a viral or strep infection. Understanding whether there is an infection, and which one is affecting your patient, is a critical first step in developing treatment plans to establish homeostasis and balance in the body.

## Which Patients Benefit from This Test?

Conditions and symptoms which may benefit from testing infections include:

- Neurological disorders
- Autoimmune diseases
- Inflammatory conditions
- Gastrointestinal dysfunction
- Immune dysfunction
- Cancer
- Chronic fatigue syndrome
- Fibromyalgia
- Chronic pain
- Joint pain
- Chronic illness
- Headaches/migraines
- Cognitive impairments
- Brain fog
- ADHD
- Autism spectrum disorder
- PANS/PANDAS
- Behavioral issues
- Multiple sclerosis

## What Markers Are Included on the Vibrant Wellness Viral Infections Panel?

The Vibrant Viral Infections Panel tests measures IgG and IgM antibodies to six viruses and one bacteria.

| Cytomegalovirus | Herpes Simplex Virus |
|---|---|
| Cytomegalovirus EIA Antigen | HSV-1 |
| Cytomegalovirus GlyB | HSV-2 |
| Cytomegalovirus p150 | **Human Herpesvirus** |
| Cytomegalovirus p28 | HHV-6 |
| Cytomegalovirus p52 | HHV-7 |
| Cytomegalovirus p65 | **Streptococcal A** |
| Cytomegalovirus p38 | Streptococcal A |
| **Epstein Barr Virus** | |
| Epstein Barr Virus EA Antigen | Epstein Barr Virus EBNA1 |
| Epstein Barr Virus VCA gp125 | Epstein Barr Virus p18 |
| Epstein Barr Virus p23 | |

## Test Prep for Blood Draw and Dried Blood Spot Collection

The Viral Infections may be tested using a blood (serum) collection or dried blood spot via fingerstick.

| | Blood (Serum) | Dried Blood Spot |
|---|---|---|
| **Collection** | One (1) EDTA specimen tube | One (1) blood specimen collection card |
| **Hydration Restriction** | None | None |
| **Fasting Restriction** | Not required | Not required |
| **Diet Restrictions** | None | None |
| **Medication Restrictions** | None | None |
| **Supplement Restrictions** | None | None |

## Methodology

Vibrant is a CLIA-certified and CAP-accredited lab.

- **Vibrant uses a peptide microarray microchip technology**
  - Peptides are synthesized on silicon wafers to detect antibody-antigen binding at the epitope level
- **Peptide microarray technology advantages:**
  - Allows for the ability to *zoom in on the **specific peptide sequences*** with a high level of precision
  - High level of sensitivity and specificity
  - Less false positive and negative results
  - High reproducibility

## Which Tests Pair Well with the Viral Infections Panel?

**Total Immunoglobulins** to evaluate a patient's baseline level of (total) IgM, IgA, IgG, and IgE.

**Gut Zoomer** to assess for infections in the gastrointestinal tract, including parasites, viruses, fungi, and bacteria.

**Candida + IBS Profile** to assess for immune responses to candida and fungal infections in the body.

**Tickborne 1.0** to assess for Lyme and co-infections (Tickborne 2.0 includes the Viral Infection Panel)

## Reference Ranges and Results

Reference ranges have been established using a sample cohort comprising of 500 relatively healthy samples. The 2.5th to 97.5th percentile was determined to calculate the healthy reference range.

**Results:**
A classification of green denotes a results that is within the normal reference range, the classification of yellow denotes a result that is moderately elevated titer with respect to the reference range and the classification of red denotes a result that is elevated with respect to the normal reference range.

- **High:** antibody levels between 20.1-30 (>97.5th %)
- **Moderate:** antibody levels between 10.1-20 (92.5 – 97.5th %)
- **In Control:** antibody levels between 0-10 (<92.5th %)

# Sample Report

| Virus Infection | Current | | Previous | |
|---|---|---|---|---|
| **Cytomegalovirus** | **IgG** | **IgM** | **IgG** | **IgM** |
| Cytomegalovirus EIA Antigen | 6.9 | 7.9 | 0.9 (04-26-2021) | 4.5 (04-26-2021) |
| Cytomegalovirus GlyB | 4.1 | 1.4 | 0.8 (04-26-2021) | 9.3 (04-26-2021) |
| Cytomegalovirus p150 | 1.6 | 5.8 | 1.2 (04-26-2021) | 8.7 (04-26-2021) |
| Cytomegalovirus p28 | 2.4 | 6.1 | 1.3 (04-26-2021) | 2.8 (04-26-2021) |
| Cytomegalovirus p52 | 2.3 | 5.1 | 1.8 (04-26-2021) | 7.5 (04-26-2021) |
| Cytomegalovirus p65 | 2.2 | 1.8 | 3.3 (04-26-2021) | 1.8 (04-26-2021) |
| Cytomegalovirus p38 | 0.9 | 4.1 | 2.3 (04-26-2021) | 8.6 (04-26-2021) |
| **Epstein Barr Virus** | **IgG** | **IgM** | **IgG** | **IgM** |
| Epstein Barr Virus EA Antigen | 8.6 | 3.7 | 1.5 (04-26-2021) | 3.7 (04-26-2021) |
| Epstein Barr Virus EBNA1 | 29.5 | 4.3 | 22.7 (04-26-2021) | 1.2 (04-26-2021) |
| Epstein Barr Virus VCA gp125 | 24.2 | 4.4 | 8.1 (04-26-2021) | 2.5 (04-26-2021) |
| Epstein Barr Virus p18 | 6.9 | 1.3 | 2.0 (04-26-2021) | 3.1 (04-26-2021) |
| Epstein Barr Virus p23 | 6.7 | 4.7 | 6.5 (04-26-2021) | 3.4 (04-26-2021) |
| **Herpes simplex virus** | **IgG** | **IgM** | **IgG** | **IgM** |
| HSV-1 | 1.0 | 7.4 | 8.2 (04-26-2021) | 3.0 (04-26-2021) |
| HSV-2 | 0.8 | 1.1 | 9.0 (04-26-2021) | 6.1 (04-26-2021) |
| **Human herpesvirus** | **IgG** | **IgM** | **IgG** | **IgM** |
| HHV-6 | 1.7 | 1.0 | 4.3 (04-26-2021) | 4.9 (04-26-2021) |
| HHV-7 | 1.4 | 3.6 | 7.0 (04-26-2021) | 6.5 (04-26-2021) |
| **Streptococcal A** | **IgG** | **IgM** | **IgG** | **IgM** |
| Streptococcal A | 8.5 | 2.9 | 1.3 (04-26-2021) | 4.9 (04-26-2021) |

Reference Range: In Control: ≤10 Moderate: 10.1-20 Risk: >20

**Regulatory Statement:**
This test has been laboratory developed and their performance characteristics determined by Vibrant America LLC, a CLIA-certified laboratory performing the test CLIA#:05D2078809. The test has not been cleared or approved by the U.S. Food and Drug Administration (FDA). Although FDA does not currently clear or approve laboratory-developed tests in the U.S., certification of the laboratory is required under CLIA to ensure the quality and validity of the tests.

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