

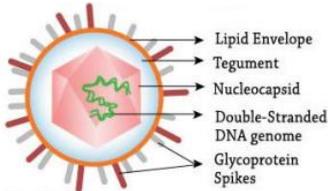
Product Specification Sheet

**Varicella Zoster Virus (VZV/chickenpox) Antibody**

□ Cat # VZV15-S

Rabbit Anti-Varicella Zoster Virus (VZV/chickenpox) antibody, IgG fraction

**SIZE:** 100 ul



**Varicella zoster virus (VZV)** is one of eight herpes viruses known to infect humans and other vertebrates. It commonly causes chicken-pox in children and adults and herpes zoster

(shingles) in adults and rarely in children. As with the other herpesviruses, VZV causes both acute illness and lifelong latency. Before vaccination became widespread, acute primary infection (**varicella** or "**chickenpox**") was common during childhood--especially in temperate climates. Primary infection is much less common in recent years as a result of childhood vaccination, but still may occur in unvaccinated individuals and in instances of vaccine failure. Varicella usually is a benign and self-limiting illness, but can be more severe in adults and in individuals with cellular immunodeficiency. These individuals are at much higher risk of pneumonia and disseminated disease with visceral involvement.

Zoster typically presents as a painful, localized cutaneous eruption occurring along 1 or more contiguous dermatomes. As with varicella, zoster usually is self-limited in the immunocompetent host, but immunocompromised persons are at risk of more severe illness with cutaneous or visceral dissemination. Pain is a frequent complication of zoster, and pain that persists following complete healing of cutaneous lesions, referred to as post-therapeutic neuralgia, can be debilitating and difficult to control.

VZV genome is a linear duplex DNA molecule, a laboratory strain has 124 Kb. VZV virions are spherical and 180–200 nm in diameter. Their lipid envelope encloses the 100 nm nucleocapsid of 162 hexameric and pentameric capsomeres arranged in an icosahedral form. VZV is closely related to the herpes simplex viruses (HSV), sharing much genome homology. The known envelope glycoproteins (gB, gC, gE, gH, gI, gK, gL) correspond with those in HSV; however, there is no equivalent of HSV gD. There are at least five clades of this virus. Clades 1 and 3 include European/North American strains; clade 2 are Asian strains, especially from Japan; and clade 5 appears to be based in India. Clade 4 includes some strains from Europe but its geographic origins need further clarification. Varivax (Merck) is a chickenpox vaccine for children, adolescents and adults. Zostavax is a more concentrated formulation of the Varivax vaccine, designed to elicit an immune response in older adults whose immunity to VZV wanes with advancing age.

**Source of Antigen and Antibodies**

**Immunogen:** Varicella Zoster grade 2 antigen (strain VZ-10)

**Host:** Rabbit

**Form:** IgG fraction

**Purification:** Ammonium sulfate followed by Protein G purification

**Recommended Secondary Antibody:** Goat anti-Rabbit IgG-HRP

**Negative Control:** Non-immune Rabbit IgG (**ADI cat# 20009-1**).

**Form & Storage of Antibody**

**IgG Fraction**

□ Solution 100 ul Supplied in PBS + 0.1% azide

□ Lyophilized **Reconstitute powder** in 100 ul distilled water

**Storage**

**Short-term:** 1 month at 4°C

**Long-term:** -20°C-80°C for 1 year

**Stability:** 12 months at -20°C or below.

**Shipping:** 4°C for solutions and room temp for powder

**Recommended Usage**

**QC:** Titer was assessed in an indirect ELISA against 1 ug/ml of coated Varicella Zoster grade 2 antigen. The OD450 was approximately 1.0 at a dilution of 1:100K.

**Western Blotting:** 1:25,00-1:50,000.

**ELISA:** Assay dependent concentration.

Above concentrations are a suggestion and user's must optimize assay based on their conditions. Antibody may work in other applications such as Flow Cytometry, IF, or IHC. These methods have not been tested by ADI.

This product is for in vitro research use only.

**Related Material available for ADI**

Catalog#	Description
VZV11-M	Monoclonal Varicella Zoster Virus (VZV/chickenpox) antigens IgG (pan, recognizes several VZV proteins)
VZV12-M	Monoclonal Varicella Zoster Virus (VZV/chickenpox) nucleocapsid (155 kda protein) IgG
VZV13-M	Monoclonal Varicella Zoster Virus (VZV/chickenpox) early gene 62 (175 kda) protein) IgG
VZV14-M	Monoclonal Varicella Zoster Virus gp1/IV (VZV/chickenpox) glycoprotein I/IV protein) IgG
VZV15-N-500	Varicella Zoster Virus (VZV/chickenpox) antigens/proteins (VZ-10/MRC)
VZV16-N-500	Varicella Zoster Virus (VZV/chickenpox) antigens/proteins (Rod Ellen/Vero cells)530-140-MMM Mouse Anti-Measles IgM ELISA kit, 96 tests, Quantitative
520-200-HVG	Human Anti-Varicella Zoster Virus (VZV/chickenpox) IgG ELISA, 96 tests, Quantitative
520-210-HVM	Human Anti-Varicella Zoster Virus (VZV/chickenpox) IgM ELISA, 96 tests, Quantitative
520-220-HVG	Human Anti-Varicella Zoster Virus (VZV/chickenpox) IgA ELISA, 96 tests, Quantitative

VZV15-S

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