# Anti-Glycoprotein E (VZV) Antibody, Human IgG1 (1B10) (MALS verified)





### **Source**

Anti-Glycoprotein E (VZV) Antibody, Human IgG1 (1B10) is a chimeric monoclonal antibody recombinantly expressed from HEK293, which combines the variable region of a mouse monoclonal antibody with Human constant domain.

Clone

1B10

**Isotype** 

Human IgG1 | Human Kappa

Conjugate

Unconjugated

**Antibody Type** 

Recombinant Monoclonal

Reactivity

Virus

## Immunogen

Recombinant Varicella zoster virus (strain Oka vaccine) Envelope Glycoprotein E (gE) derived from human 293 cells

## **Specificity**

This product is a specific antibody specifically reacts with Glycoprotein E/gE (VZV).

# **Application**

**Application** Recommended Usage

ELISA 0.1-8 ng/mL

### **Purity**

>90% as determined by SDS-PAGE.

>95% as determined by SEC-MALS.

### **Purification**

Protein A purified/ Protein G purified

### **Formulation**

Lyophilized from 0.22  $\mu m$  filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

#### Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

### **Storage**

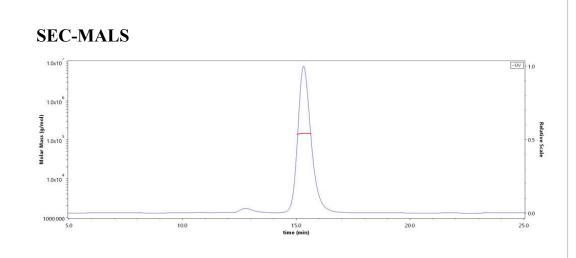
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

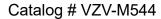
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

**SDS-PAGE** 

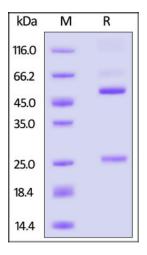




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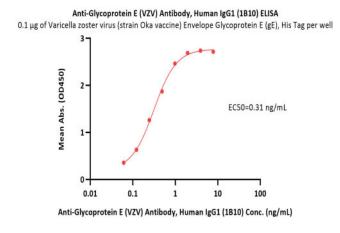






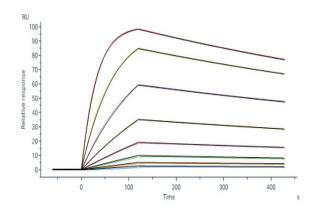
Anti-Glycoprotein E (VZV) Antibody, Human IgG1 (1B10) on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%.

# **Bioactivity-ELISA**



Immobilized Varicella zoster virus (strain Oka vaccine) Envelope Glycoprotein E (gE), His Tag (Cat. No. GLE-V52H3) at 1  $\mu$ g/mL (100  $\mu$ L/well) can bind Anti-Glycoprotein E (VZV) Antibody, Human IgG1 (1B10) (Cat. No. VZV-M544) with a linear range of 0.1-1 ng/mL (QC tested).

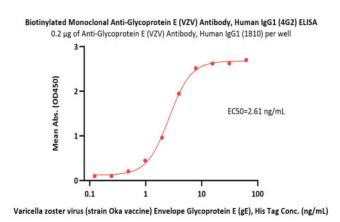
## **Bioactivity-SPR**



Anti-Glycoprotein E (VZV) Antibody, Human IgG1 (1B10) (Cat. No. VZV-M544) captured on Protein A Chip can bind Varicella zoster virus (strain Oka vaccine) Envelope Glycoprotein E (gE), His Tag (Cat. No. GLE-V52H3) with an affinity constant of 5.63 nM as determined in SPR assay (Biacore 8K) (Routinely tested).

The purity of Anti-Glycoprotein E (VZV) Antibody, Human IgG1 (1B10) (Cat. No. VZV-M544) is more than 95% and the molecular weight of this protein is around 135-155 kDa verified by SEC-MALS.

Report



Immobilized Varicella zoster virus (strain Oka vaccine) Envelope Glycoprotein E (gE), His Tag (Cat. No. GLE-V52H3) on Anti-Glycoprotein E (VZV) Antibody, Human IgG1 (1B10) (Cat. No. VZV-M544) precoated (0.2  $\mu$ g/well) plate can bind Biotinylated Monoclonal Anti-Glycoprotein E (VZV) Antibody, Human IgG1 (4G2) (Cat. No. VZV-BLM545)at 0.25  $\mu$ g/mL (100  $\mu$ L/well) with a linear range of 0.2-8 ng/mL (Routinely tested).



# Anti-Glycoprotein E (VZV) Antibody, Human IgG1 (1B10) (MALS verified)

Catalog # VZV-M544



## **Background**

Varicella-zoster virus (VZV) is a neurotropic virus belonging to the Herpesviridae family. Primary VZV infection causes chickenpox and is followed by a life-long latent infection established mainly in the cranial and dorsal root ganglia. Reactivation of the virus is often associated with shingles (herpes zoster). Glycoprotein E (gE) is one of the known glycoproteins (gB, gC, gE, gH, gI, gK, gI) of VZV that is most abundantly expressed on the surface of virus and infected cells, playing an important role in viral replication and cell-to-cell spread. The strongly immunogenic gE can provide strong IgG signal in body fluid, which makes it ideal to be developed as an antigen for analysis of IgG antibodies. gE also demonstrates high potency as a vaccine immunogen and is formulated as the single viral envelope protein that constitutes the GSK VZV recombinant subunit vaccine Shingrix®.

**Clinical and Translational Updates** 

