

Varicella zoster virus

DAG4708 VZV

Lot. No. (See product label)

PRODUCT INFORMATION

Product overview	Varicella zoster virus
Description	Infected cells are harvested and virus extracted by alkaline treatment and sonication. The preparation is purified by sucrose cushion centrifugation. The resulting antigen consists of a high concentration of virus and viral components as well as some cell
Source	HEL-299 cell culture
Species	VZV
Immunogen	Varicella zoster virus - Strain Ellen
Inactivation	Beta-propiolactone treatment. Inactivity is confirmed by attempted growth under original culture conditions. Since no procedure can guarantee absolute sterility, the reagent should be handled with appropriate safety precautions.
Applications	By ELISA

PACKAGING

Storage	-20° C to -80°C. Avoid repeated freeze-thaw cycles
Shipping	10 years from manufacture

BACKGROUND

Introduction	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 Herpes zoster (shingles) in adults and rarely in children. Varicella Zoster Virus (VZV), a member of the human herpes virus family, causes two distinct clinical manifestations: childhood chickenpox (Varicella) and shingles (zoster). Varicella is the outcome of the primary infection with VZV, whereas, zoster is the result of VZV reactivation from latently infected sensory ganglia which occurs predominantly in aging and immunosuppressed individuals. 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. VZV virions are spherical and 150-200 nm in diameter. Its lipid envelope encloses the nucleocapsid of 162 capsomeres arranged in a hexagonal form. Its DNA is a single linear, double strand molecule, 125,000 nt long. In contrast, the genes for gE proteins can be deleted from herpes simplex virus and pseudorabies virus, albeit with significant reductions in infectivity in cell culture and in animal models. Since the VZV genome does not encode a homologue of gD, VZV gE may have functions that are usually segregated between gD and gE, or the gE to gI complex, in other alpha herpesviruses.
Keywords	herpes virus 3; Envelope glycoprotein gI; gI; Glycoprotein IV; GPIV; HHV 3; HHV3; HHV3gp39; Membrane glycoprotein gE; Varicella Zoster Virus; VZV; VZVgE; VZVgI; Herpesviridae; Alpha herpesvirinae; Varicellovirus; HHV-3

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