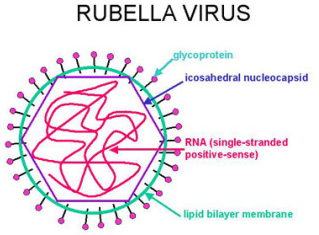
Rubella Vaccines Antibody ELISA Kits, Recombinant Proteins, Peptides and Antibodies

Rubella, commonly known as German measles, is a disease caused by the rubella virus. The name "rubella" is derived from the Latin, meaning little red. The name rubella is sometimes confused with rubeola, an alternative name for measles; the diseases are unrelated. In some other European languages, like Spanish, rubella and rubeola are synonyms, and rubeola is not an alternative name for measles. This disease is often mild and attacks often pass unnoticed. Rubella is a common childhood infection usually with minimal systemic upset although transient arthropathy may occur in adults. Serious complications are very rare. Acquired (i.e. not congenital) rubella is transmitted via airborne droplet emission from the upper respiratory tract of active cases. There is no carrier state: the reservoir exists entirely in active human cases. The disease has an incubation period of 2 to 3 weeks. The disease is caused by Rubella virus, a togavirus that is enveloped and has a single-stranded RNA genome. Rubella virus specific IgM antibodies are present in people recently infected by Rubella virus but these antibodies can persist for over a year and a positive test result needs to be interpreted with caution. Rubella infections are prevented by active immunization programs using live, disabled virus vaccines. Two **live attenuated virus vaccines**, RA 27/3 and Cendehill strains were effective in the prevention of adult disease. However their use in pre pubertile females did not produce a significant fall in the overall incidence rate of CRS in the U.K. Reductions were only achieved by immunization of all children. The vaccine is now usually given as part of the MMR vaccine.



Rubella virus is the only member of the genus of Rubivirus and belongs to the family of Togaviridae, whose members commonly have a genome of single-stranded RNA of positive polarity which is enclosed by an icosahedral capsid. There are prominent "spikes" (projections) of 6 nm composed of the viral envelope proteins **E1** and **E2** embedded in the membrane. The E1 glycoprotein is considered immunodominant in the humoral response induced against the structural proteins and contains both neutralizing and hemagglutinating determinants. The genome has 9,762 nucleotides and encodes 2 nonstructural polypeptides (p150 and p90) within its 5′-terminal two-thirds and 3 structural polypeptides (C, E2, and E1) within its 3′-terminal one-third. Both envelope proteins E1 and E2 are glycosylated.

MMR II vaccine is a mixture of three live attenuated viruses, administered via injection. The vaccine is sold by Merck as M-M-R II, GlaxoSmithKline Biologicals as **Priorix**, Serum Institute of India as **Tresivac**, and Sanofi Pasteur as **Trimovax**. The live viruses require animal or human cells as a host for production of more viruses. For example, in the case of mumps and measles viruses, the virus strains were grown in embryonated hens' eggs and chick embryo cell cultures. This produced strains of virus which were adapted for the hen's egg and less well-suited for human cells. These strains are therefore called attenuated strains. The Rubella component, **Meruvax**, is propagated using a human lung cell line (WI-38). The **MMRV vaccine**, a combined measles, mumps, rubella and varicella vaccine, has been proposed as a replacement for the MMR vaccine to simplify administration of the vaccines.

ADI has developed antibody ELISA kits to determine the efficacy of existing Rubella vaccines or test new vaccines.

Rubella vaccine Related ELISA kits

ELISA Kit Description	Species	IgG Specific	IgM Specific
Rubella Vaccine (Virus Antibody) ELISA Kits	Human	510-100-HRG	510-110-HRM
	Mouse	510-120-MRG	510-130-MRM
	Mouse	510-100-HRG	510-110-HRM

Rubella Related Antibodies, Peptides, and Recombinant Proteins Ordering Information

item	Catalog#	Product Description	Product Type
Rubella Virus	RUBL11-A	Goat Anti-Rubella virus (HPV77 strain) IgG	Antibodies
	RUBL11-BTN	Goat Anti-Rubella virus (HPV77 strain) IgG-Biotin conjugate	Antibodies
	RUBL11-FITC	Goat Anti-Rubella virus (HPV77 strain) IgG-FITC conjugate	Antibodies
	RUBL11-HRP	Goat Anti-Rubella virus (HPV77 strain) IgG-HRP conjugate	Antibodies
	RUBL12-M	Monoclonal Anti-Rubella virus (HPV72) IgG, aff pure	Antibodies
	RUBL15-N-500	Rubella virus (HPV77 strain) proteins/antigens extract	Antibodies
E1 protein	RP-1413	Recombinant Rubella Virus E1 Mosaic protein	Pure protein
	RUBL17-M	Monoclonal Anti-Rubella virus strucural glycoprotein E1 IgG, aff pure	Antibodies
	RUBL13-M	Monoclonal Anti-Rubella virus envelop protein E1 IgG, aff pure	Antibodies
E2 Protein	RUBL14-M	Monoclonal Anti-Rubella virus envelop protein E2 IgG, aff pure	Antibodies
	RP-1414	Recombinant Rubella Virus E2 protein	Pure protein
Capsid	RP-1415	Recombinant Rubella Virus Capsid C protein	Pure protein
	RUBL15-M	Monoclonal Anti-Rubella virus capsid protein IgG, aff pure	Antibodies
Core	RUBL16-M	Monoclonal Anti-Rubella virus core protein IgG, aff pure	Antibodies

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