ALPHA DIAGNOSTIC INTERNATIONAL

Product Specification Sheet

Respiratory Syncytial Virus (RSV)

□ Cat.# RSV17-S	Rabbit Anti- Respiratory Syncytial Virus (RSV) GP antiserum	**SIZE**: 100 ul
□ Cat.# RSV11-C	Recombinant Respiratory Syncytial Virus (RSV) GP control for western blot	**SIZE**: 100 ul

Respiratory Syncytial virus (RSV) is a leading cause of severe respiratory infection in infants and children. RSV is a medium-sized enveloped RNA paramyxovirus of the genus pneumovirus. RSV is a respiratory pathogen that infects human and chimpanzees. The severity of the disease is very diverse ranging from mild cold symptoms to severe and life-threatening. It's the leading cause of pneumonia and bronchiolitis in infants. It may cause mortality or morbidity in the elderly as well as immunodeficient individuals. It is the most common pathogen leading to hospitalization in young children up to the age of 5. Approximately two thirds of infants are infected with RSV within their first year and 90% have been infected by the age of 2. Each year, 4-5 million children younger than 4 years acquire an RSV infection, and more than 125,000 are hospitalized annually in the United States because of this infection. RSV Infection may result from either direct or indirect contact with oral or nasal secretions from an infected person.

RSV is an enveloped, nonsegmented, negative-sense RNA virus. The RSV genome is a single strand of RNA composed of approximately 15,000 nucleotides that are transcribed into 11 major subgenomic mRNAs. Each of the mRNAs encodes a major viral protein. Three of these proteins are transmembrane surface proteins (G, F, and SH). One protein is a nonglycosylated virion matrix protein (M), and four proteins associate with the genomic RNA to form the viral nucleocapsid (N, P, L, and M2 open reading frame 1 [M2 ORF-1]). M2 ORF-2 is a second, distinct protein transcribed from the M2 gene, which has defined properties in transcriptional regulation. Finally, two proteins (NS1 and NS2) are nonstructural viral products that accumulate in infected cells but are present in only trace amounts in mature virions.

Specific diagnostic tests for confirming RSV infection include Culture, Antigen-revealing techniques, Polymerase chain reaction (PCR) assay and Molecular probes. Chest radiography is frequently obtained in children with severe RSV infection. High risk infants can be treated with a neutralizing antibody to RSV (palivizumab or Synagis®) to reduce the risk of severe RSV illnesses. The economic burden of this disease is enormous as RSV is responsible for more medically-attended inpatient and outpatient visits than influenza in children younger than 1 year. RSV infection is a common childhood viral disease for which a vaccine is currently not available.

Source of Antigen and Antibodies

Antigen	Recombinant purified RSV GP ~57.2 kDa (515 aa)
Ab Host/type	Rabbit, polyclonal, Unpurified antiserum (**cat # RSV11-S**)
2-ab	**Goat Anti-rabbit IgG-HRP** cat # 20320 (AP, biotin, FITC conjugates also available)
-ve control IgG	**#20009-1, Rabbit (non-immune) IgG, purified, suitable for ELISA, Western, IHC as –ve control**

Respiratory Syncytial virus (RSV) GP is expressed in *E.coli* and purified using proprietary technique (>95%, ~57.2 kDa). Purified **recombinant Respiratory Syncytial virus for Western blot +ve control (#RSV11-C)** is supplied in SDS-PAGE sample buffer. Store at -20oC in suitable size aliquots. SDS may crystallize in cold conditions. It should redissolve by warming before taking it from the stock. It should be heated once prior to loading on gels.

Form & Storage of Antibodies/Peptide Control

Antiserum (unpurified)

□ 100ul □ □ solution □ lyophilized powder

Supplied 0.05% azide, **Reconstitute** powder in 100 ul PBS

Storage

Short-term: unopened, undiluted liquid vials at -20°C and powder at 4oC or -20oC..

Long-term: at –20°C or below in suitable aliquots after reconstitution. Do not freeze and thaw and store working, diluted solutions.

Stability: 6-12 months at –20oC or below.

Shipping: 4oC for solutions and room temp for powder

Recommended Usage

ELISA, Western blot
Cellular Activity

Specificity & Cross-reactivity

Respiratory Syncytial virus (RSV, 515-aa, protein accession # AAB59858.1) is 100% conserved in Human Respiratory Syncytial Virus.

General References: Collins PL, Huang YT, Wertz GW (1984) Proc. Natl. Acad. Sci. U.S.A. 81, 7683-7687.

**This product is for In vitro research use only.*

Related material available from ADI

510-300-HRA Human Anti-Respiratory syncytial virus (RSV) IgA ELISA kit, 96 tests, quantitative

510-305-HRG Human Anti-Respiratory syncytial virus (RSV) IgG ELISA kit, 96 tests, quantitative

510-310-HRM Human Anti-Respiratory syncytial virus (RSV) IgM ELISA kit, 96 tests, quantitative

510-320-MRA Monkey Anti-Respiratory syncytial virus (RSV) IgA ELISA kit, 96 tests, quantitative

510-325-MRG Monkey Anti-Respiratory syncytial virus (RSV) IgG ELISA kit, 96 tests, quantitative

510-330-MRM Monkey Anti-Respiratory syncytial virus (RSV) IgM ELISA kit, 96 tests, quantitative

510-345-MRG Mouse Anti-Respiratory syncytial virus (RSV) IgG ELISA kit, 96 tests, quantitative

510-365-BRG Bovine Anti-Respiratory syncytial virus (RSV/BRSV) IgG ELISA kit, 96 tests, quantitative

RSV11-M Anti-Respiratory Syncytial Virus (RSV), clone 1

RSV12-M Anti-Respiratory Syncytial Virus (RSV), clone 2

RSV17-S-antiserum 151216AC

Alpha Diagnostic Intl Inc., 6203 Woodlake Center Dr, San Antonio, TX 78244, USA; **Email**: service@4adi.com
☎ (800) 786-5777; (210) 561-9515; **Fax**: (210) 561-9544; **Web Site**: www.4adi.com