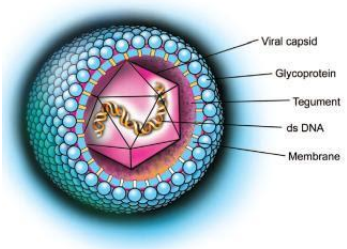
ALPHA DIAGNOSTIC INTERNATIONAL

Product Specification Sheet

Mouse Cytomegalovirus (MCMV/MuHV-1) Glycoprotein B (gB) Antibodies and controls

□ Cat.#MCGB11-S	Rabbit Anti-Mouse CMV gB protein Antiserum	**SIZE**:100 ul
□ Cat.#MCGB11-C	Recombinant (E. Coli) Mouse CMV gB for Western Blot	**SIZE**:100 ul

Muromegalovirus is a genus of viruses in the order Herpesvirales, in the family Herpesviridae, in the subfamily Betaherpesvirinae. Rodents that belong to the betaherpesvirinae subfamily of herpesviruses serve as natural hosts. There are currently three species in this genus including the type species Murid herpesvirus 1. Diseases associated with this genus include: infected peritoneal macrophages, dendritic cells (DC) and hepatocytes, inducing significant pathology in both the spleen and the liver. Murid viruses murid herpesvirus 1 (MuHV-1) and murid herpesvirus 2 (MuHV-2)--previously defined as mouse cytomegalovirus (MCMV) and rat cytomegalovirus (RCMV)--belong to this genus.



HCMV Human Cytomegalovirus

Murine cytomegalovirus (MCMV) and human cytomegalovirus (HCMV) are members of the subfamily betaherpesvirinae. HCMV is a ubiquitous human pathogen, but most primary infections do not lead to an apparent disease. The major envelope glycoprotein complex of HCMV is called gC-I. The glycoprotein complex gC-I consists of two mature glycoproteins with molecular masses of 93 to 130 kDa and 52 to 58 kDa, derived by proteolytic cleavage from a precursor glycoprotein of 150 to 170 kDa. The proteins are encoded by a gene referred to as gB because of its sequence homology with the glycoprotein B (gB) gene of herpes simplex virus (HSV). A significant fraction of the neutralizing antibodies in human antisera are directed against the proteins of the gC-I complex. In addition, antisera raised against vaccinia virus recombinants expressing gB or monoclonal anti-gB antibodies effectively neutralize the virus in vitro. These data suggest that the glycoprotein B is an important target for the humoral immune response against HCMV. Due to the species specificity of HCMV, in vivo experiments cannot be conducted. Therefore, the availability of an appropriate animal model is important. MCMV has been useful for studying CMV infections because of the many similarities between MCMV and HCMV in biology and pathogenesis. Thus, the study of the murine immune response to MCMV may be valuable for understanding the situation in humans.

Source of Antigen and Antibodies

Antigen	Recombinant purified MCGB protein ~56 kDa (#MCGB15-R-10 aa)
Ab Host/type	Rabbit, polyclonal, Unpurified antiserum (**cat # MCGB11-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**

Mouse Cytomegalovirus (MCMV/MuHV-1) Glycoprotein B is expressed in *E.coli* and purified using proprietary technique (>95%, ~65.4 kDa). Purified Mouse Cytomegalovirus (MCMV/MuHV-1) Glycoprotein B for Western blot +ve control (#MCGB11-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

Specificity & Cross-reactivity

Mouse Cytomegalovirus (MCMV/MuHV-1; 458 aa, gB protein is conserved in Murid viruses (100%) and has sequence homology with Rat cytomegalovirus (54%). Recombinant purified MCGB15-R-10 is also available.

General References: Rapp M, (1992) J. Virol. 66:4399-4406; Messerle M, (1992) Virology 191:355-367; Rawlinson W.D, (1996) J. Virol. 70:8833-8849.

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

Related material available from ADI

Catalog# Prod Description

3300-370-CMG Human Anti-Cytomegalovirus (HCMV/CMV/Human Herpes Virus-5/HHV-5) IgG ELISA kit, 96 tests, Quantitative

3300-375-CMM Human Anti-Cytomegalovirus (HCMV/CMV/Human Herpes Virus-5/HHV-5) IgM ELISA kit, 96 tests, Quantitative

3300-380-CMA Human Anti-Cytomegalovirus (HCMV/CMV/Human Herpes Virus-5/HHV-5) IgA ELISA kit, 96 tests, Quantitative

3300-770-CMG Monkey Anti-Cytomegalovirus (HCMV/CMV/Human Herpes Virus-5/HHV-5) IgG ELISA kit, 96 tests, Quantitative

3300-775-CMM Monkey Anti-Cytomegalovirus (HCMV/CMV/Human Herpes Virus-5/HHV-5) IgM ELISA kit, 96 tests, Quantitative

3300-780-CMA Monkey Anti-Cytomegalovirus (HCMV/CMV/Human Herpes Virus-5/HHV-5) IgA ELISA kit, 96 tests, Quantitative

AE-301000-03N Mouse Anti-Cytomegalovirus ((MCMV/MuHV-1) Glycoprotein B (gB) IgG negative serum

AE-301000-04P Mouse Anti-Cytomegalovirus ((MCMV/MuHV-1) Glycoprotein B (gB) IgG positive serum

AE-301000-1 Recombivirus Mouse Anti-Cytomegalovirus (MCMV/MuHV-1) gB IgG ELISA Kit, 96 tests

MCGB15-R-10 Recombinant (E. Coli) Mouse Cytomegalovirus (MCMV/MuHV-1) Glycoprotein B (gB) Protein (his-tag, >95% Pure)

MCGB11-S-antiserum 160222SV

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