CD Creative Diagnostics®

High-Quality Reagents for Equine Disease Research

Introduction

Equine infectious and parasitic diseases continue to affect horse populations worldwide, impacting animal health, limiting international movement, and imposing substantial economic consequences on equine industries. Several high-impact pathogens, including Equine Infectious Anemia Virus (EIAV), Equine Influenza Virus (EIV), and Equine Arteritis Virus (EAV), remain of particular concern in many regions. Effective research and reliable detection methods are essential for understanding infection dynamics, supporting preventive strategies, and monitoring pathogen circulation.

To meet the needs of equine infectious disease research, Creative Diagnostics provides a series of antigens and antibodies related to equine infectious diseases, supporting serological detection and a wide range of research applications. Each reagent is evaluated for identity, purity, and biological activity on laboratory platforms. These materials are suitable for use in competitive and sandwich ELISAs, western blotting, immunofluorescence assays, and other research techniques. Their excellent performance makes them reliable tools for studies focused on equine diseases.

Viral and Parasitic Pathogens

Equine Infectious Anemia Virus (EIAV)

EIAV is a lentivirus that establishes lifelong infection and induces a range of clinical outcomes, including recurrent fever, anemia, and weight loss in horses. The viral core protein p26 is a major immunodominant antigen and is widely used in serological assays for EIAV exposure. EIAV gp45, a transmembrane envelope glycoprotein involved in membrane fusion and viral entry, also contains exposed epitopes capable of eliciting detectable humoral immune responses.

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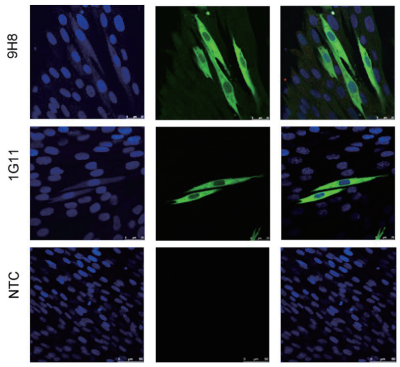

Fig. 1 IFA analysis of EIAV-infected FDD cells using 9H8 and 1G11 MAbs.

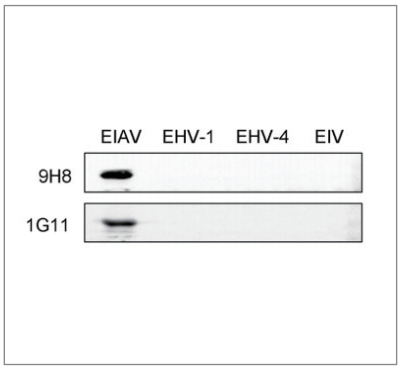

Fig. 2 Different equine infectious viruses were tested using 9H8 and 1G11 MAbs by Western blot.

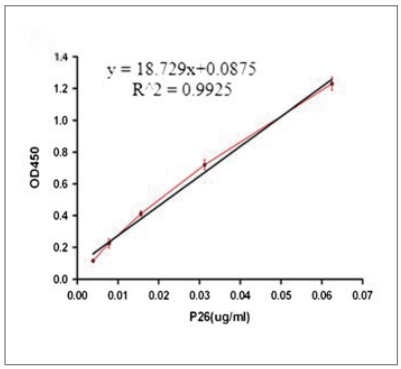

Fig. 3 The linear range of determination for EIAV p26 detection is 3.9 - 62.5 ng/ml.
Capture: mAb 9H8
Detection: HRP Conjugated mAb 1G11
Protein: EIAV p26

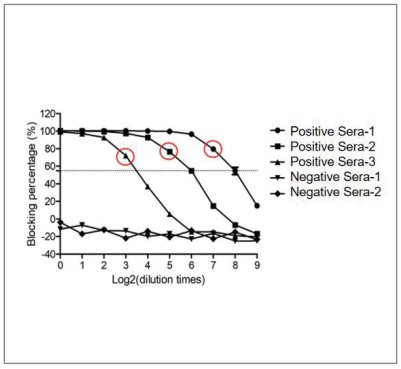

Fig. 4 Blocking ELISA analysis of EIA Ab positive and negative serum using mAb 1G11 as the coating antibody and p26-HRP as the competitive antigen.

Products list

Type	Cat. No.	Product Name	Application
Antigen	DAGC-H017	Recombinant EIAV P26 Protein [His]	ELISA, WB
Antigen	DAGC-H018	Recombinant EIAV gp45 Protein [His]	ELISA, WB
Antibody	DMABC-JX307	Mouse Anti-EIAV P26 monoclonal antibody, clone 9H8	WB, IFA, ELISA, sELISA
Antibody	DMABC-JX308	Mouse Anti-EIAV P26 monoclonal antibody, clone 1G11	WB, IFA, cELISA, sELISA
Antibody	DMABC-JX323	Mouse Anti-EIAV REV monoclonal antibody, clone 6B11	WB, ELISA

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Equine Arteritis Virus

Equine viral arteritis (EVA) is a respiratory and reproductive disease in equines caused by equine arteritis virus (EAV). Among the eight structural proteins of EAV, the nucleoprotein (NP) is the most conserved across different strains. NP is abundantly expressed in EAV-infected cells and is therefore widely regarded as a key target for EAV detection.

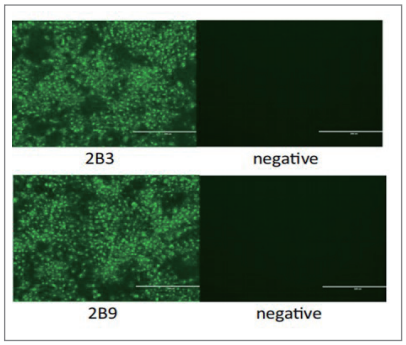

Fig.5 IFA analysis of EAV-infected RK-13 cells with mAb 2B3 and 2B9.

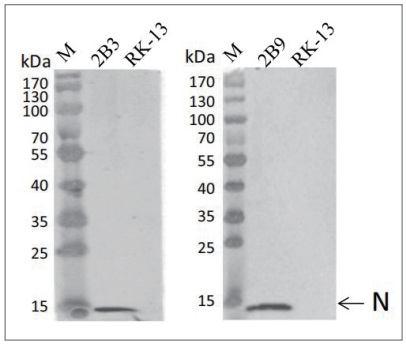

Fig. 6 Western blot analysis of EAV with mAb 2B3 and 2B9. Samples loaded included an EAV-infected RK-13 lysate and an uninfected RK-13 lysate.

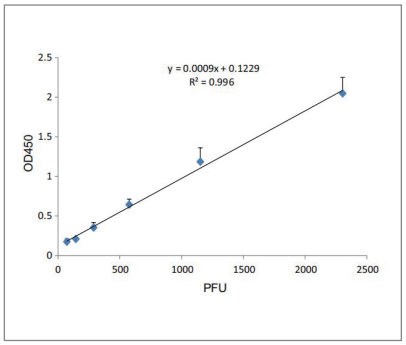

Fig. 7 Quantitation of EAV particles by the Sandwich-ELISA method showed a good linear relationship, with a viral load from 72 - 2297 PFU. Capture: mAb 2B9 Detection: HRP-Conjugated mAb 2B3

Products list

Type	Cat. No.	Product Name	Application
Antigen	DAGC-H007	Recombinant EAV NP Protein [His]	ELISA, WB
Antibody	DMABC-JX313	Mouse Anti-EAV N monoclonal antibody, clone 2B3	WB, IFA, ELISA
Antibody	DMABC-JX315	Mouse Anti-EAV N monoclonal antibody, clone 2B9	WB, IFA, ELISA

Equine Influenza

Equine Influenza A subtype H3N8 remains the primary influenza strain in horses. The nucleoprotein (NP) is highly conserved across influenza A viruses and elicits strong, readily detectable antibody responses. Recombinant NP proteins are frequently incorporated into competitive or indirect antibody detection assays.

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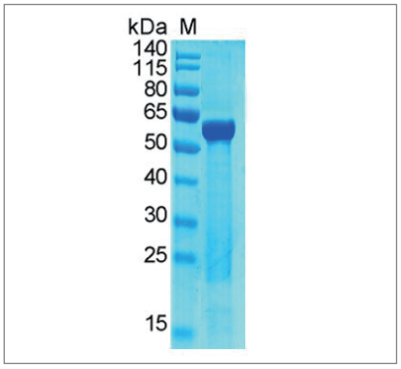

Fig. 8 SDS–PAGE analysis of purified EIV NP protein.

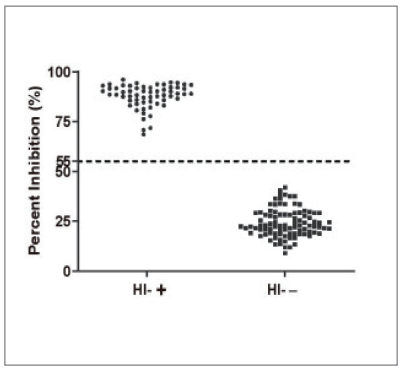

Fig. 9 ROC analysis for the EIV NP based-cELISA using EIV-negative sera (n = 93) and EIV-positive sera (n = 60).

Products list

Type	Cat. No.	Product Name	Application
Antigen	DAGC-H005	Recombinant EIV NP Protein [His]	ELISA, WB
Antigen	DAGC-H006	Recombinant EIV PB1 Protein [His]	ELISA, WB
Antibody	DMABC-JX309	Mouse Anti-EIV NP monoclonal antibody, clone NP57	ELISA, WB
Antibody	DMABC-JX310	Mouse Anti-EIV NP monoclonal antibody, clone NP7	ELISA, WB
Antibody	DMABC-JX311	Mouse Anti-EIV NP monoclonal antibody, clone NP12	ELISA, WB
Antibody	DMABC-JX312	Mouse Anti-EIV NP monoclonal antibody, clone 2G11	WB, cELISA
Antibody	DMABC-JX306	Mouse Anti-EIV NP monoclonal antibody, clone 8F7	ELISA, WB
Antibody	DMABC-JX316	Mouse Anti-EIV NP monoclonal antibody, clone SC09-4	WB, cELISA
Antibody	DMABC-JX317	Mouse Anti-EIV NP monoclonal antibody, clone SC09-6	WB, cELISA
Antibody	DMABC-JX318	Mouse Anti-EIV NP monoclonal antibody, clone SC09-8	WB, cELISA
Antibody	DMABC-JX319	Mouse Anti-EIV NP monoclonal antibody, clone SC09-12	WB, cELISA
Antibody	DMABC-JX320	Mouse Anti-EIV NP monoclonal antibody, clone XJ07-4	WB, cELISA
Antibody	DMABC-JX314	Mouse Anti-EIV-PB1 monoclonal antibody, clone 8F7	ELISA, WB
Antibody	DMABC-JX324	Equine Anti-EIA-HA monoclonal antibody, clone NAb1	Neutralization

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African Horse Sickness Virus

African Horse Sickness Virus (AHSV) possesses multiple structural proteins, among which VP7 is the most widely recognized for its serological relevance. VP7 is highly conserved across the nine AHSV serotypes and displays robust immunogenicity. These features make VP7 a preferred antigen in serology-focused research aimed at detecting exposure or studying serogroup-level immune responses.

Products list

Type	Cat. No.	Product Name	Application
Antigen	DAGC-H004	Recombinant AHSV VP7 Protein [His]	ELISA, WB
Antibody	DMABC-JX297	Mouse Anti-AHSV VP7 monoclonal antibody, clone 1H5G10	WB
Antibody	DMABC-JX298	Mouse Anti-AHSV VP7 monoclonal antibody, clone 1H10G1	WB, ELISA
Antibody	DMABC-JX299	Mouse Anti-AHSV VP7 monoclonal antibody, clone 3G3B9	WB, ELISA
Antibody	DMABC-JX300	Mouse Anti-AHSV VP7 monoclonal antibody, clone 4D1D5	WB, ELISA
Antibody	DMABC-JX301	Mouse Anti-AHSV VP7 monoclonal antibody, clone 4C4D8	WB, ELISA
Antibody	DMABC-JX327	Mouse Anti-AHSV-1 VP2 monoclonal antibody, clone 9E7	WB, IFA, ELISA

Salmonella Abortusequi

Salmonella enterica subsp. *enterica serovar Abortusequi (S. Abortusequi)* is the most common causative agent of equine abortus salmonellosis and is well known as a host-adapted serovar that is associated with abortion in mares, neonatal septicemia, and multiple abscesses, orchitis and polyarthritis. The flagellin gene is commonly used as a serotype detection identifier for *Salmonella*. In addition, the flagellin protein is abundantly expressed on the bacteria surface and exhibits strong antigenicity.

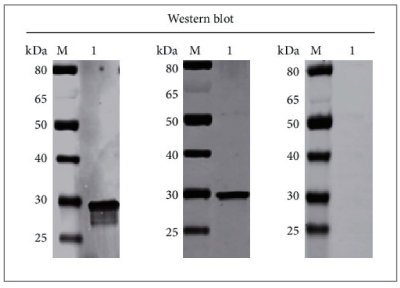

Fig. 10 Western blot analysis of recombinant FljB protein using an anti-his tag antibody, S. Abortusequi positive serum and S. Abortusequi negative serum.

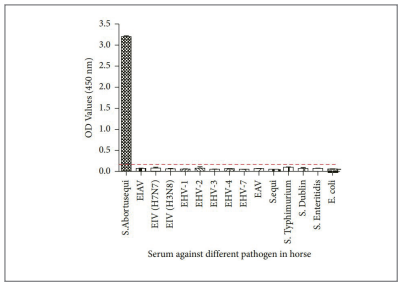

Fig. 11 Specificity of the recombinant FljB-based ELISA. Test sera included a standard positive serum of S. Abortusequi and horse sera positive for various pathogens.

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Products list

Type	Cat. No.	Product Name	Application
Antigen	DAGC-H001	Recombinant S. abortusequi FljB Protein [His]	ELISA, WB
Antigen	DAGC-H002	Recombinant S. abortusequi ompA Protein [His]	ELISA, WB
Antigen	DAGC-H003	Recombinant S. abortusequi groEL Protein [His]	ELISA, WB
Antibody	DMABC-JX291	Mouse Anti-S. abortusequi FljB monoclonal antibody, clone 1A10	WB, cELISA, ELISA
Antibody	DMABC-JX292	Mouse Anti-S. abortusequi FljB monoclonal antibody, clone 1C5F10	WB, ELISA
Antibody	DMABC-JX293	Mouse Anti-S. abortusequi ompA monoclonal antibody, clone 3A6A2	WB
Antibody	DMABC-JX294	Mouse Anti-S. abortusequi ompA monoclonal antibody, clone 1A4F9	WB
Antibody	DMABC-JX295	Mouse Anti-S. abortusequi ompA monoclonal antibody, clone 2A1B9	WB
Antibody	DMABC-JX296	Mouse Anti-S. abortusequi groEL monoclonal antibody, clone E11	WB, cELISA

Equine Piroplasmosis

Equine Piroplasmosis is caused by *Theileria equi* and *Babesia caballi*. In *T. equi*, members of the Equi Merozoite Antigen family, particularly EMA1 and EMA2, are major immunodominant surface proteins and are widely utilized in antibody detection studies. For *Babesia caballi*, BC48 is an immunodominant merozoite protein that elicits persistent antibody responses in infected horses.

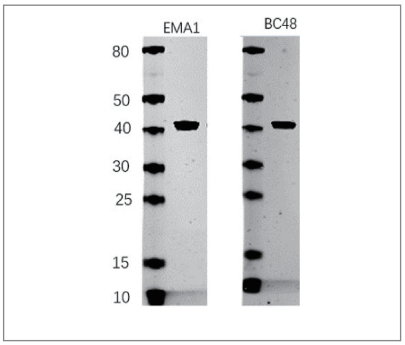

Fig. 12 Western blot analysis of Anti-EMA1 and Anti-BC48 mAbs

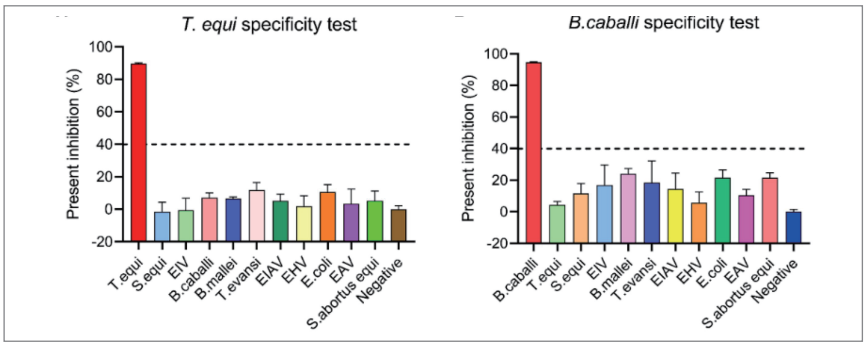

Fig. 13 Analysis of the specificity of the cELISA using recombinant EMA1/Bc48 protein and HRP-conjugated Anti-EMA1/Bc48 mAbs.

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Type	Cat. No.	Product Name	Application
Antigen	DAGC-H008	Recombinant Theileria equi EMA1 Protein [His]	ELISA, WB
Antigen	DAGC-H009	Recombinant Babesia caballi BC48 Protein [His]	ELISA, WB
Antibody	DMABC-JX321	Mouse Anti-Theileria equi EMA1 monoclonal antibody, clone EMA1	WB, cELISA
Antibody	DMABC-JX322	Mouse Anti-Babesia caballi BC48 monoclonal antibody, clone BC48	WB, cELISA

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