

EBV Ea-D (1108-1): sc-69679

BACKGROUND

Epstein-Barr virus (EBV), also designated human herpesvirus 4 (HHV-4), is a member of the herpesvirus family and is one of the most common human viruses. EBV infects B cells and, though often asymptomatic, it can cause infectious mononucleosis, a disease characterized by fatigue, fever, sore throat and muscle soreness. The EBV-induced early antigens (Ea) are among several antigen complexes that have been identified in EBV-infected cells. The Ea complex is composed of diffuse (Ea-D) and restricted (Ea-R) components. The activity of Ea-D is suppressed during latent infection. BMRF1, the gene that encodes for Ea-D, is closely associated with the gene encoding for EBV DNA polymerase, and Ea-D is essential for the activity of this polymerase. Ea-D forms a complex with EBV DNase and, together, they may play a role in viral replication.

REFERENCES

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STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

SOURCE

EBV Ea-D (1108-1) is a mouse monoclonal antibody raised against affinity purified early antigen polypeptides from induced Raji cells precipitated with African Burkitt's lymphoma sera.

PRODUCT

Each vial contains 200 μ g IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

EBV Ea-D (1108-1) is available conjugated to agarose (sc-69679 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-69679 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-69679 PE), fluorescein (sc-69679 FITC), Alexa Fluor® 488 (sc-69679 AF488), Alexa Fluor® 546 (sc-69679 AF546), Alexa Fluor® 594 (sc-69679 AF594) or Alexa Fluor® 647 (sc-69679 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-69679 AF680) or Alexa Fluor® 790 (sc-69679 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

EBV Ea-D (1108-1) is recommended for detection of EBV Ea-D p55/p50 of Epstein-Barr Virus origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)] and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

Molecular Weight of EBV Ea-D: 43 kDa.

Molecular Weight of EBV Ea-D p52/p50: 52/50 kDa.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

SELECT PRODUCT CITATIONS

- Zhang, L., Wu, H., Sun, G., Xu, X., Sun, X. and Cao, L. 2016. Trichloromethane fraction of *Incarvillea compacta* induces lytic cytotoxicity and apoptosis in Epstein-Barr virus-positive gastric cancer AGS cells. *BMC Complement. Altern. Med.* 16: 344.

RESEARCH USE

For research use only, not for use in diagnostic procedures.