**BACKGROUND**

La Crosse Virus is an arbovirus (specifically, a Bunyavirus) that causes La Crosse encephalitis. It is a zoonotic pathogen that cycles between the daytime-biting treehole mosquito, *Aedes triseriatus* and vertebrate amplifier hosts in deciduous forest habitats. The viruses stay alive during the winter in mosquito eggs, which then hatch into virus-carrying mosquitoes that can transmit La Crosse Virus to humans. The La Crosse Virus genome contains three negative-sense RNA segments designated by their size. The large (L) segment encodes an RNA-dependent RNA polymerase; the medium (M) segment encodes a polyprotein precursor that is posttranslationally cleaved into the envelope glycoproteins G1 and G2 and a third polypeptide, NSm; and a small (S) segment encoding for the nucleocapsid protein. Symptoms of infection include nausea, headache and vomiting in milder cases and seizures, coma, paralysis and permanent brain damage in severe cases.

**REFERENCES**


**PRODUCT**

Each vial contains 200 µg IgG2a kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

La Crosse Virus G1/G2 (10G5.4) is available conjugated to agarose (sc-57891 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-57891 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-57891 PE), fluorescein (sc-57891 FITC), Alexa Fluor® 488 (sc-57891 AF488), Alexa Fluor® 546 (sc-57891 AF546), Alexa Fluor® 594 (sc-57891 AF594) or Alexa Fluor® 647 (sc-57891 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-57891 AF680) or Alexa Fluor® 790 (sc-57891 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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**APPLICATIONS**

La Crosse Virus G1/G2 (10G5.4) is recommended for detection of La Crosse Virus G1 and G2 of La Crosse Virus origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

**RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ 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).

**STORAGE**

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

**RESEARCH USE**

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

**PROTOCOLS**

See our website at www.scbt.com for detailed protocols and support products.

**SOURCE**

La Crosse Virus G1/G2 (10G5.4) is a mouse monoclonal antibody raised against La Crosse Virus grown on E6 Vero cells.