DATA SHEET

Jena Bioscience

Anti-dsRNA monoclonal antibody J5

mouse, IgG2b, kappa chain

Cat. No.	Amount
RNT-SCI-10040200	200 µg
RNT-SCI-10040500	500 µg

SCICONS™

For general laboratory use.

Shipping: shipped on gel packs

Storage Conditions: store at -20 °C to -80 °C upon reconstitution for long-term storage

Additional Storage Conditions: avoid freeze/thaw cycles, store in aliquot.

After adding 10 mM sodium azide the undiluted antibody (1 µg/µl) can be stored at 4°C for a short period of time

Shelf Life: 12 months after date of delivery

Form: lyophilised from a 1 mg/ml solution in PBS

Solubility: To prepare a 1 µg/µl PBS antibody solution add 200 µl (RNT-SCI-10040200) or 500 µl (RNT-SCI-10040500) sterile DNAse/RNAse-free distilled water. As a result of the lyophilisation procedure, the reconstituted antibody may contain small amounts of denatured protein in the form of aggregates that may interfere with some applications such as immunohistochemistry (e.g. by giving high backgrounds). We therefore highly recommend to spin down (microcentrifuge) the reconstituted antibody before use and to use the supernatant only.

Description:
SCICONS anti-dsRNA monoclonal antibody J5 recognizes dsRNA with very similar affinity and specificity to SCICONS J2 antibody (Schönborn *et al.*, 1991), but has a different isotype – thus allowing more flexibility for the simultaneous detection of dsRNA with other markers, particularly in immunofluorescence microscopy, and has been used to detect replicative intermediates of the fish virus Infectious Pancreatic Necrosis Virus (IPNV) (Levican-Asenjo *et al.*, 2019) or of ECMV in Vero cells.

Applications:
ELISA, dsRNA immunoblotting, immunofluorescence microscopy

Please note that nucleic acid separation prior to dsRNA-immunoblotting must be carried out by polyacrylamide gel electrophoresis, because the sensitivity of detection is considerably lower after blotting from agarose gels.

Specificity:
SCICONS anti-dsRNA monoclonal antibody J5 recognizes double-stranded RNA (dsRNA) provided that the length of the helix is greater than or equal to 40 bp. dsRNA-recognition is independent of the sequence and nucleotide composition of the antigen. All naturally occurring dsRNAs investigated up to now (40-50 species) as well as poly(I).poly(C) and poly(A).poly(U) have been recognised by J5, although in some assays its affinity to poly(I).poly(C) is about 10 times lower than that to other dsRNA antigens.

Species Origin: Mouse
Heavy Chain Isotype: IgG2b
Light Chain Isotype: kappa

Quality control:
Activity: AN-ELISA

Related Products:
PCR-grade water, #PCR-258

Selected References:

Schönborn *et al.* (1991) Monoclonal antibodies to double-stranded RNA as probes of RNA structure in crude nucleic acid extracts. *Nucleic Acids Res.***19**: 2993.

Lukacs (1994) Detection of virus infection in plants and differentiation between coexisting viruses by monoclonal antibodies to double-stranded RNA. *J. Virol. Methods***47**: 255.

Lukacs (1997) Detection of sense:antisense duplexes by structure-specific anti-RNA antibodies. In: Antisense Technology. A Practical Approach, C. Lichtenstein and W. Nellen (eds), pp. 281-295. IRL Press, Oxford

Levicán-Asenjo *et. al.* (2019). Salmon cells SHK-1 internalize infectious pancreatic necrosis virus by macropinocytosis. *J Fish Dis.* **42(7)**:1035.