Monoclonal Antibody J2

Description J2 monoclonal antibody (mAb), mouse, IgG2a, kappa chain

Amount: 200 µg **Product No:** 10010200 **Batch No:** J2-1820

Amount: 500 µg **Product No:** 10010500 **Batch No:** J2-1901

Concentration after reconstitution **1.00** mg/ml as determined as determined by $A_{280\ nm}$ (A280 nm = 1.47 corresponds to 1 mg/ml antibody) gel electrophoretically pure IgG antibody.

Reconstitution The lyophilised sample should be reconstituted with:

200 µl sterile distilled water for 200µg antibody

500 µl sterile distilled water for 500µg antibody

The mAb will then be in PBS without any stabilisers at the concentration given.

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 centrifuging (microcentrifuge) the reconstituted antibody before use and using the supernatant.

Specificity The mAb J2 recognises 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 J2, although in some assays its affinity to poly(I)·poly(C) is about 10 times lower than that to other dsRNA antigens.

Applications mAb J2 can be used for ELISA, dsRNA-immunoblotting, immunoaffinity chromatography and in certain systems also for immunohistochemistry (see references below).

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.

Not for use for clinical purposes. For *in vitro* use only.

Stability and storage

After reconstitution antibodies should be aliquoted and stored at -20 °C or -70°C.

After adding 10 mM sodium azide undiluted antibody can also be stored at +4 °C for a short period of time. For long term storage the mAb should be kept frozen. Repeated freezing/thawing cycles should be avoided.

References

Schönborn, J., Oberstrass, J., Breyel, E., Tittgen, J., Schumacher, J. and Lukacs, N. (1991) Monoclonal antibodies to double-stranded RNA as probes of RNA structure in crude nucleic acid extracts. Nucleic Acids Res.19, 2993-3000.

Lukacs, N. (1994) Detection of virus infection in plants and differentiation between coexisting viruses by monoclonal antibodies to double-stranded RNA. J. Virol. Methods 47, 255-272.

Lukacs, N. (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.

When referring to this antibody in a publication, please cite „SCICONS J2“ from “English and Scientific Consulting Kft, Hungary (SCICONS)”. You may also include our weblink (https://scicons.eu).

On our publications page at https://scicons.eu/en/publications/, you will find over 500 annotated peer-reviewed research papers that have used our anti-dsRNA antibodies. We hope that this searchable database will provide you with relevant information and links to methods and applications.

In light of the recent “reproducibility crisis” debate (Nature, 518:27-29, 2015; Nature, 483:531-33, 2012), we are keen to contribute to any and all efforts made towards more transparency and independent validation in the antibody industry.

To this end, we would like to draw your attention to two independent antibody listings sites that give researchers the opportunity to submit product reviews:

a) Biocompare (commercial site) will compensate scientists that submit reviews containing images of their own data with a USD25 amazon gift card. The reviews maybe submitted to:

   http://www.biocompare.com/start-your-review/

b) pAbmAbs (academic site) organises regular lotteries for all reviewers, with one lucky winner taking home EUR500. Each review (good or bad) counts as a lottery ticket. Reviews may be submitted to:

   http://pabmabs.com/wordpress/?p=4041

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