

Product datasheet for **TA398704**

Mouse Monoclonal Antibody [Clone ID: J2]

Product data:

Product Type:	Primary Antibodies
Clone Name:	J2
Applications:	Dot, dsRNA-immunoblotting, ELISA, FC, ICC, IHC, Immuno-affinity-chromatography
Host:	Mouse
Isotype:	IgG2a, kappa
Clonality:	Monoclonal
Formulation:	The lyophilised sample should be reconstituted with 200 µl sterile distilled water. The mAb will then be in PBS without any stabilisers at a concentration of 1 mgr/ml. 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.
Concentration:	Concentration after reconstitution: 1.00 mg/ml as determined by A280 nm (A280 nm = 1.47 corresponds to 1 mg/ml antibody).
Purification:	Affinity chromatography on Protein G.
Conjugation:	Unconjugated
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. When kept lyophilized the product will remain stable for 10 years at -20 °C or -70°C.
Stability:	Shelf life: one year from despatch.



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Background:

Over the past decade our double-stranded RNA (dsRNA) antibodies have been used extensively to detect and characterise plant and animal viruses with dsRNA genomes or intermediates. In addition, the anti-dsRNA antibodies can be used as a diagnostic tool to detect pathogens, including detection in paraffin-embedded fixed tissue samples (Richardson et al. 2010). The J2 anti-dsRNA IgG2a monoclonal antibody has become the gold standard in dsRNA detection. It was used initially for the study of plant viruses, but since the seminal paper of Weber et al. in 2006, where J2 was used to show that all the positive strand RNA viruses tested produced copious amounts of dsRNA in infected cells, this antibody has been used extensively in a wide range of systems, as documented in over 200 scientific publications. J2 can be used to detect dsRNA intermediates of viruses as diverse as Hepatitis C virus, Dengue virus, rhinovirus, Chikungunya virus, Rabies virus, Polio virus, Classic swine fever virus, Brome mosaic virus and many more in cultured cells and also in fixed paraffin-embedded histological samples. J2 has been used to elucidate how anti-viral responses are initiated, what counter-strategies viruses have adopted to avoid them, and to explore the viral life cycle by enabling ultrastructural localisation studies of viral nucleic acid replication sites (Welsch et al., 2009 & Knoop et al., 2011). J2 has been used successfully in electron microscopy, in immunofluorescence microscopy, in immunohistochemistry, and various immunocapture methods, such as dot blots and ELISA. J2 has also been recommended as a diagnostic tool to detect whether an unknown pathogen is bacterial or viral in nature (Richardson et al., 2010). Recently J2 has also been used to monitor the removal of dsRNA from in vitro synthesised mRNA preparations that may have potential use in gene therapy (Kariko et al., 2011).

Synonyms:

Mouse anti dsRNA

Note:

Gel electrophoretically pure IgG antibody.