



Monoclonal Antibody 2G4

Target: long double-stranded RNA

Produced in: Mouse

Isotype: IgM, Kappa chain

Specificity: Specific for long double-stranded RNA provided that the length of the helix is >30 bp. While 2G4 can recognise 30 nt dsRNA, its reactivity is optimal for dsRNA of 50 nt or greater. The recognition is independent of the nucleotide composition. 2G4 does not bind single-stranded RNA, ssDNA, dsDNA or RNA:DNA hybrids.

Applications: For Research Use Only

IFA, ELISA, immunoaffinity isolation.

IFA: shown to be effective following fixation using 4% formaldehyde or 100% acetone.

ELISA: Can be used in a capture ELISA, or in fixed cell ELISA following 4% formaldehyde or $\geq 20\%$ acetone. Note that for the detection of dsRNA replication intermediates for some viruses requires 80% acetone fixation or 4% formaldehyde.

Storage: Contains 0.02% sodium azide as a preservative. Store at 4 °C.

Can be aliquoted and stored frozen, but freeze/thawing must be avoided.

Publications: O'Brien CA, Hobson-Peters J, Yam AW, Colmant AM, McLean BJ, Prow NA, Watterson D, Hall-Mendelin S, Warrilow D, Ng ML, Khromykh AA, Hall RA. 2015. *Viral RNA intermediates as targets for detection and discovery of novel and emerging mosquito-borne viruses*. PLoS neglected tropical diseases **9**:e0003629.

Blouin AG, Ross HA, Hobson-Peters J, O'Brien CA, Warren B, MacDiarmid R. *A new virus discovered by immunocapture of double-stranded RNA, a rapid method for virus enrichment in metagenomic studies*. Mol Ecol Resour. 2016 Sep;16(5):1255-63.