

Cytomegalovirus (8B1.2, 1G5.2 & 2D4.2)

Format	Catalog No.	Pack size	Dilution
Concentrated	G2102 A, B, C	0.1, 0.5, 1.0 mL	1:100 - 200
Prediluted	G2102 AA, BB	6.0, 3.0 mL	Ready to use

ANTIBODY SPECIFICATIONS

- **HOST SPECIES:** Mouse
- **CLONE:** 8B1.2, 1G5.2 & 2D4.2
- **ISOTYPE:** IgG2a
- **CELLULAR LOCALIZATION:** Nuclear
- **IMMUNOGEN:** Purified human CMV antigen.
- **MOLECULAR WEIGHT:** ~ kDa
- **SPECIES REACTIVITY:** Human; other species not tested.
- **POSITIVE CONTROLS:** CMV Infected Tissue

INTENDED USE

This antibody is intended **for research use only (RUO)** and is not approved for diagnostic or therapeutic applications. It is optimized for the detection of Cytomegalovirus protein in formalin-fixed, paraffin-embedded (FFPE) human tissues by immunohistochemistry (IHC).

SUMMARY AND APPLICATION

The Cytomegalovirus (CMV) antibodies 8B1.2, 1G5.2, and 2D4.2 are monoclonal antibodies, not proteins, and therefore don't have a molecular weight in the same way that a protein does. They are designed to bind to specific antigens on the CMV virus. The 8B1.2 clone, for example, has a calculated molecular weight of 62.87 kDa. The blend of these three clones, also known as MMab, is used for detecting CMV in various assays like immunofluorescence (IF) and immunohistochemistry (IHC).

SCIENTIFIC BACKGROUND

Cytomegalovirus (CMV) is a virus of the Herpes-virus group; in humans it is commonly known as HCMV or Human Herpesvirus 5 (HHV-5). CMV belongs to the Betaherpesvirinae subfamily of Herpesviridae, which also includes Roseolovirus.

RECOMMENDED USAGE

- **IHC Protocol Highlights:**
 - Dilution: 1–2 µg/mL
 - Incubation: 30 minutes at room temperature
 - Antigen Retrieval: Heat in 10 mM Tris with 1 mM EDTA (pH 9.0) at 95°C for 45 minutes, followed by cooling
- **Specimen Type:** FFPE sections, preferably ~4 µm

FORMULATION & STORAGE:

- Buffer: 10 mM PBS, 0.05% BSA, 0.05% sodium azide
- Storage:
 - o Dilution: 1–2 µg/MI
 - o Without azide: –20 to –80°C
- Shelf Life: 24 months under proper conditions
- Hazard Classification: Non-hazardous; no MSDS required

LIMITATIONS

- Interpretation must be made by a qualified pathologist
- Tissue fixation and handling may affect staining quality
- Negative results do not always indicate absence of antigen—consider panel testing

PRECAUTIONS

- Contains 0.05% sodium azide – avoid ingestion and contact with skin or mucosa
- Wear gloves and avoid contact with eyes or mucosa
- Do not use reagents past expiration or if packaging appears compromised
- Do not pipette by mouth or reuse slides/containers without proper sterilization

TECHNICAL SUPPORT

For technical assistance, please contact Genebio Solution's Technical Support at www.genebiosolution.com