

Anti-CMV glycoprotein gB [HCMV37] Standard Size Ab00641-23.0

This chimeric rabbit antibody was made using the variable domain sequences of the original Mouse IgG2a format, for improved compatibility with existing reagents, assays and techniques.

Isotype and Format: Rabbit IgG, Kappa

Clone Number: HCMV37

Alternative Name(s) of Target: Human cytomegalovirus glycoproteins gB

UniProt Accession Number of Target Protein:

Published Application(s): ICC, IP, NTRL, ELISA, IF, IHC-Fr

Published Species Reactivity: CMV

Immunogen: The original antibody was generated by immunization of rabbit with recombinant HCMV gB-VAC virus.

Specificity: This antibody binds envelope glycoprotein B of the human cytomegalovirus, that plays a role in host cell entry, cell to-cell virus transmission, and fusion of infected cells.

Application Notes: This antibody immunoprecipitates gB from HCMV infected cells and neutralizes HCMV infectivity in vitro. Immunofluorescence was used to study whether HCMV gB synthesized in infected cells is transported to the cell surface (PMID: 3024973). Humanized version of this antibody was made by grafting technique. Significant restoration of binding was obtained by substitution of human VH amino acids Thr28, Phe29, Ser30 with murine residues Ser28, Ile29, Thr30, in conjunction with the position 94 change (PMID: 7772562). This antibody was used in detection of gB in an ELISA (PMID: 22836657).

Antibody First Published in: Tempest et al. Identification of framework residues required to restore antigen binding during reshaping of a monoclonal antibody against the glycoprotein gB of human cytomegalovirus. Int J Biol Macromol. 1995 Feb;17(1):37-42. PMID:7772562

Note on publication: Describes characterisation of the structural requirements of HCMV37 essential for antigen binding.

Product Form

Size: 200 µg Purified antibody.

Purification: Protein A affinity purified

Supplied In:

PBS with 0.02% Proclin 300.

Storage Recommendation: Store at 4°C for up to 3 months. For longer storage, aliquot and store at -20°C.

Concentration: 1 mg/ml.

Important note – This product is for research use only. It is not intended for use in therapeutic or diagnostic procedures for humans or animals.