

## Anti-Carbonic Anhydrase IX [M75] Standard Size Ab00414-1.4

This antibody was created using our proprietary Fc Silent™ engineered Fc domain containing key point mutations that abrogate binding to Fc gamma receptors.

This reformatted mouse antibody was made using the variable domain sequences of the original Mouse IgG2b format, for improved compatibility with existing reagents, assays and techniques.

**Isotype and Format:** Mouse IgG1, Fc Silent™, Kappa

**Clone Number:** M75

**Alternative Name(s) of Target:** CA9; MN/CA IX; endogenous protein p54/58N

**UniProt Accession Number of Target Protein:** Q16790

**Published Application(s):** Blocking, crystallography, IB, ITC, WB, ELISA, FC, IF, IHC

**Published Species Reactivity:** Human

**Immunogen:** The original antibody was generated by immunizing BALB/C mice with MaTu-infected HeLa cells.

**Specificity:** This antibody is specific for the sequence PGEEDLP, which is repeated several times between the 61st and 96th aa residues of human carbonic anhydrase IX's PG domain.

**Application Notes:** The original format of this antibody (mouse IgG2b) was characterized by and used in IB (WB), IF, and FC assays (Pastoreková et al., 1992; PMID: 1312272). This antibody's epitope has been determined by a competitive ELISA against the peptide APGEEDLPA. Furthermore, it was used for WB and was shown to blocks the capacity of immobilized MN/CA IX to attach cells (Závada et al., 2000; PMID: 10839295). The Fab version of this antibody was crystallized and analyzed. Additionally, an scFv version of this antibody was created, and its thermodynamic parameters against the peptide DLPGEEDLPGE were evaluated via ITC. Its  $K_d$  was determined to be 0.42 µM (Král et al., 2008; PMID: 18041760). This antibody was used for WB in breast cell lines and for IHC in xenograft tumors grown from PC-3 cells in mice (Li et al., 2009; PMID: 19538935).

**Antibody First Published in:** Pastoreková et al. A novel-quasi-viral agent, MaTu, is a two-component system. Virology. 1992 Apr;187(2):620-6. [PMID:1312272](#)

**Note on publication:** The original publication introduces MaTu, a quasi-viral agent derived from a human mammary tumor, and details the generation and characterization of monoclonal antibodies against it.

## 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.