Monoclonal
Anti-human CHRM2 Antibody

Background
Muscarinic Acetylcholine Receptor M2 (CHRM2) is a 60 kDa 7-transmembrane glycoprotein that is predominantly expressed in the heart and central nervous system. CHRM2 mediates signal transduction in the autonomic nervous system in response to muscarinic agonists. Polymorphisms of CHRM2 are associated with alcohol dependence, depression, bipolar disorder, and recovery of heart function after myocardial infarction. Human CHRM2 shares 96% aa sequence identity with mouse and rat CHRM2.

Preparation
This antibody was produced from a hybridoma resulting from the fusion of a mouse myeloma with B cells obtained from a mouse immunized with human CHRM2-transfected NS0 cells (Accession # P08172). The IgG fraction of the tissue culture supernatant was purified by Protein G affinity chromatography.

Formulation
Lyophilized from a 0.2 μm filtered solution in phosphate-buffered saline (PBS) with 5% trehalose.

Reconstitution
Reconstitute with sterile PBS. If 0.2 mL of PBS is used, the antibody concentration will be 500 μg/mL.

Storage
Lyophilized samples are stable for twelve months from date of receipt when stored at -20° C to -70° C. Upon reconstitution, the antibody can be stored at 2° - 8° C for 1 month without detectable loss of activity. Reconstituted antibody can also be aliquotted and stored frozen at -20° C to -70° C in a manual defrost freezer for six months without detectable loss of activity. Avoid repeated freeze-thaw cycles.

Specificity
This antibody detects rhCHRM2 in immunohistochemistry.

Application
Immunohistochemistry - This antibody was used at a concentration of 25 μg/mL with appropriate secondary reagents to detect CHRM2 in paraffin-embedded normal human heart tissue sections. For chromogenic detection of labeling, the use of R&D Systems Cell and Tissue Staining Kits (CTS Series) is recommended.


Optimal dilutions should be determined by each laboratory for each application.