



# Anti- human CD56 Mouse Monoclonal Primary Antibody

Clone: UMAB83

**IVD**

**REF** CE00012

## CATALOG NUMBER

C0012MA01-MA 0.1 mL  
C0012MA05-MA 0.5 mL  
C0012MA10-MA 1.0 mL

## ENGLISH

### Intended use

Anti- human CD56 (Clone: UMAB83) Mouse Monoclonal Primary Antibody is intended for detection of CD56 protein expression in frozen or formalin fixed human tissues and cells. The clinical interpretation of any positive staining or its absence should be complemented by morphological and histological studies with proper controls. Evaluations should be made within the context of the patient's clinical history and other diagnostic tests by a qualified pathologist. The antibody is intended for *in vitro* diagnostic (IVD) use.

### Background

This gene encodes a cell adhesion protein which is a member of the immunoglobulin superfamily. The encoded protein is involved in cell-to-cell interactions as well as cell-matrix interactions during development and differentiation. The encoded protein has been shown to be involved in development of the nervous system, and for cells involved in the expansion of T cells and dendritic cells which play an important role in immune surveillance. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jun 2011].

Alternative names: MSK39; NCAM; Neural Cell Adhesion Molecule 1

### Reagent provided

Anti-human CD56 Mouse Monoclonal Primary Antibody (Clone: UMAB83) is provided in liquid form in 20mM Sodium phosphate, 150mM Sodium chloride, 0.2% BSA, 0.09% Sodium azide, pH 7.4. The isotype of the antibody is IgG1,k. The protein concentration is approximately 1.0 +/- 0.05 mg/mL.

For immunohistochemistry, the primary antibody may be used at a working dilution of 1:100 – 1:200 for formalin-fixed, paraffin-embedded human tissue. It can be dependent upon the detection system used. These are guidelines only, and optimal dilutions should be determined by the individual laboratory.

### Immunogen

Human recombinant protein fragment corresponding to amino acids 20-718 of human NCAM1 (NP\_851996) produced in HEK293T cells.

## Specificity

The specificity of the anti- human CD56 Mouse Monoclonal Primary Antibody was established on known positive cells in human pancreas (Islets of Langerhans). The anti-human CD56 presented no staining on formalin fixed human liver and positive staining on formalin fixed human pancreas using immunohistochemical (IHC) test methods.

## Materials Required but Not Supplied

Antibody diluent, HIER solution, Antibody detection kits, Chromogen, Staining reagents, negative and positive tissue control slides are not included.

## Precautions

1. For use by trained professionals only.
2. This product contains sodium azide ( $\text{NaN}_3$ ), a chemical highly toxic in pure form. At product concentrations, though not classified as hazardous,  $\text{NaN}_3$  may react with lead and copper plumbing to form highly explosive build-ups of metal azides. Upon disposal, flush with large volumes of water to prevent metal azide build-up in plumbing.
3. Wear appropriate Personal Protective Equipment to avoid contact with eyes and skin.
4. Unused reagents should be disposed of according to local, State, and Federal regulations.

## Storage

Store at 2-8°C. Do not use the product past the expiration date indicated on the label. If reagents are stored under any other conditions, the end user must verify the acceptability of those conditions. There are no obvious signs to indicate instability of this product therefore, positive and negative controls should be run simultaneously with patient specimens.

## Specimen Preparation

### Paraffin Sections

Anti- human CD56 Mouse Monoclonal Primary Antibody can be used on formalin-fixed, paraffin-embedded tissue sections at a working dilution of 1:100 to 1:200. Anti- human CD56 Mouse Monoclonal Primary Antibody (Clone: UMAB83) requires heat induced epitope retrieval (HIER) Accel 3 in 1 EDTA buffer solution, pH 8.7 at 110C for 3 minutes in a pressure chamber/cooker for staining. Pretreatment with Accel HIER buffer from GBI Labs B22C-100 showed optimal staining of anti-CD56 antibody at a dilution of 1:200 on human pancreas and negative staining on human liver. The dilutions are estimates; the actual staining results may vary due to reagents and detection protocols used. Validation of antibody performance and final protocol are the responsibility of the end user.

## Staining procedure

### Manual Staining Procedure

1. Deparaffinize slides.
2. Submerge slides in peroxidase quenching solution for ~10 minutes, then rinse 2x with dH<sub>2</sub>O.
3. Heat Induced Epitope Retrieval is required for this antibody; Accel 3 in 1 EDTA solution, pH 8.7 at 110C for 3minutes.
4. Allow slides to cool down from step 3, rinse with distilled water, wash with PBS-T 3 times, 2 minutes each.
5. Apply serum blocking solution.[Optional]
6. Apply primary antibody and incubate for 30-60 minutes at room temperature. After incubation wash with PBS-T 3 times, 2 minutes each.
7. Apply secondary antibody and incubate according to the data sheet of the detection system. Wash with PBS-T 3 times, 2 minutes each.
8. Apply enzyme conjugate and incubate according to data sheet of detection system. Wash with PBS-T 3 times, 2 minutes each.
9. Apply chromogen and incubate 5-10 minutes and rinse with distilled water.

## Staining interpretation

The cellular staining pattern for Anti- human CD56 Mouse Monoclonal Primary Antibody is cytoplasmic and membranous.

## Performance Characteristics

### Predicted Staining in Normal Tissue/Cells

Human liver was shown to be negative for this antibody.

### Predictive Staining in Tumor

Anti- human CD56 Mouse Monoclonal (Clone: UMAB83) produced cytoplasmic and membranous staining when screened on human pancreas. Positive staining was seen on pancreas; the glandular cells of the pancreas are negative.

## Contact Information



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