



# Anti- human IDO1 Mouse Monoclonal Primary Antibody

Clone: UMAB126

**IVD**

**REF** CE00061

## CATALOG NUMBER

C0061MA01-MA 0.1 mL  
C0061MA05-MA 0.5 mL  
C0061MA10-MA 1.0 mL

## ENGLISH

### Intended use

Anti- human IDO1 (Clone: UMAB126) Mouse Monoclonal Primary Antibody is intended for detection of IDO1 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 indoleamine 2,3-dioxygenase (IDO) - a heme enzyme that catalyzes the first and rate-limiting step in tryptophan catabolism to N-formyl-kynurenine. This enzyme acts on multiple tryptophan substrates including D-tryptophan, L-tryptophan, 5-hydroxy-tryptophan, tryptamine, and serotonin. This enzyme is thought to play a role in a variety of pathophysiological processes such as antimicrobial and antitumor defense, neuropathology, immunoregulation, and antioxidant activity. Through its expression in dendritic cells, monocytes, and macrophages this enzyme modulates T-cell behavior by its peri-cellular catabolization of the essential amino acid tryptophan.[provided by RefSeq, Feb 2011].

Alternative names: IDO; IDO-1; INDO

### Reagent provided

Anti-human IDO1 Mouse Monoclonal Primary Antibody (Clone: UMAB126) 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 0.8 +/- 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

Full length human recombinant protein of human IDO1(NP\_002155) produced in HEK293T cell.



## Specificity

The specificity of the anti- human IDO1 Mouse Monoclonal Primary Antibody was established on known positive human spleen. The anti-human IDO1 presented no staining on human breast cancer and positive staining on human spleen tissue 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 IDO1 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 IDO1 Mouse Monoclonal Primary Antibody (Clone: UMAB126) working dilution requires heat induced epitope retrieval (HIER) for 3 minutes using pressure chamber at 110C for staining. We recommend using HIER Citrate solution pH 6.0, which showed optimal staining of anti-IDO1 antibody at a dilution of 1:200 on human spleen tissue. 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. Deparaffinized slides.
2. Rinse with distilled water; wash with PBS-T 3 times, 2 minutes each.
3. Apply serum blocking solution.[Optional]
4. Apply primary antibody and incubate for 30-60 minutes at room temperature. After incubation wash with PBS-T 3 times, 2 minutes each.
5. Apply secondary antibody and incubate according to the data sheet of the detection system. Wash with PBS-T 3 times, 2 minutes each.
6. Apply enzyme conjugate and incubate according to data sheet of detection system. Wash with PBS-T 3 times, 2 minutes each.
7. Apply chromogen and incubate 5-10 minutes and rinse with distilled water.

## Staining interpretation

The cellular staining pattern for Anti- human IDO1 Mouse Monoclonal Primary Antibody is cytoplasmic and membranous.

## Performance Characteristics

### Predicted Staining in Tissue

The three human breast cancer cases were shown to be negative for this antibody.

### Predictive Staining in Tissue

Anti- human IDO1 Mouse Monoclonal (Clone: UMAB126) produced cytoplasmic and membranous staining when screened on human spleen.

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