

# Human Enolase 1/2 antibody

Catalog Number: ATGA0424

## PRODUCT INFORMATION

---

**Catalog number**

ATGA0424

**Clone No.**

AT1G7

**Product type**

Monoclonal Antibody

**UnitProt No.**

P06733

**NCBI Accession No.**

NP\_001419

**Alternative Names**

Alpha-enolase, 2-phospho-D-glycerate hydro-lyase, C-myc promoter-binding protein, Enolase 1, MBP-1, MPB-1, Non-neural enolase, NNE, Phosphopyruvate hydratase, PPH, Plasminogen-binding protein, ENO1L1, MBPB1, MPB1, ENO1-IT1, ENO1 intronic transcript 1

## PRODUCT SPECIFICATION

---

**Antibody Host**

Mouse

**Reacts With**

Human

**Concentration**

1mg/ml (determined by BCA assay)

**Formulation**

Liquid in. Phosphate-Buffered Saline (pH 7.4) with 0.02% Sodium Azide, 10% glycerol

**Immunogen**

Recombinant human Alpha-enolase (1-434aa) purified from E. coli

**Isotype**

IgG2a kappa

**Purification Note**

By protein-A affinity chromatography

**Application**

ELISA, WB, ICC/IF, FACS

**Usage**

The antibody has been tested by ELISA, Western blot analysis, Flow cytometry and ICC/IF to assure specificity and reactivity. Since application varies, however, each investigation should be titrated by the reagent to obtain optimal results.

# Human Enolase 1/2 antibody

Catalog Number: ATGA0424

## Storage

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

## BACKGROUND

### Description

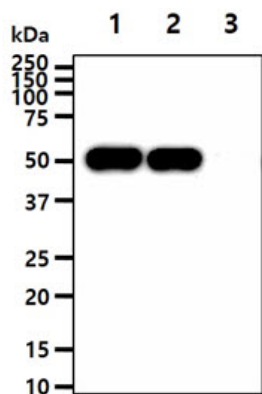
Alpha-enolase, also known as Enolase 1, is one of three enolase isoenzymes and a glycolytic enzyme expressed in most tissues. This protein plays a key role in anaerobic metabolism under hypoxic conditions and may act as a cell surface plasminogen receptor during tissue invasion. Abnormal expression of alpha-enolase is associated with tumor progression in some cases of breast and lung cancer. It also has been identified as an autoantigen associated with Hashimoto's encephalopathy and severe asthma.

### General References

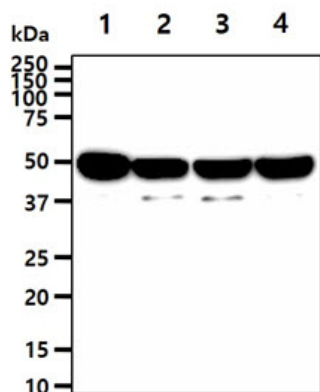
Das R., et al. (2009) *Blood*. 113(22): 5371-2.  
 Ueno NT., et al. (2008) *Cancer Res*. 68(22): 9302-10.

## DATA

### Western blot analysis (WB)



The recombinant protein (50ng) was resolved by SDS-PAGE, transferred to PVDF membrane and probed with anti-human ENO1, 2 antibody (1:1000). Proteins were visualized using a goat anti-mouse secondary antibody conjugated to HRP and an ECL detection system.  
 Lane 1.: ENO1 (Alpha-enolase) recombinant protein  
 Lane 2.: ENO2 (Gamma-enolase) recombinant protein  
 Lane 3.: ENO3 (Beta-enolase) recombinant protein.

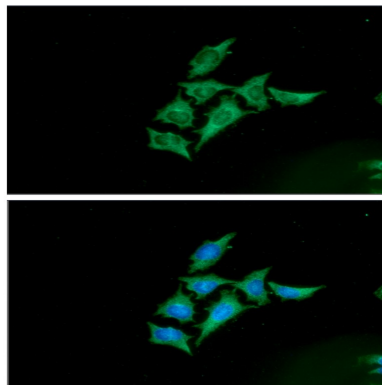


The cell lysates (40ug) were resolved by SDS-PAGE, transferred to PVDF membrane and probed with anti-human ENO1, 2 antibody (1:1000). Proteins were visualized using a goat anti-mouse secondary antibody conjugated to HRP and an ECL detection system.  
 Lane 1.: PC3 cell lysate  
 Lane 2.: MCF7 cell lysate  
 Lane 3.: 293T cell lysate  
 Lane 4.: HeLa cell lysate

### Immunocytochemistry/Immunofluorescence (ICC/IF)

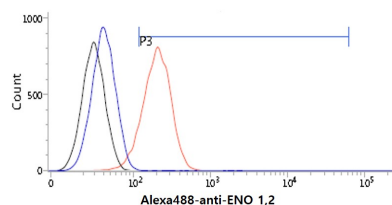
## Human Enolase 1/2 antibody

Catalog Number: ATGA0424



ICC/IF analysis of ENO1, 2 in HeLa cells. The cell was stained with ATGA0424 (1:100). The secondary antibody (green) was used Alexa Fluor 488. DAPI was stained the cell nucleus (blue).

### Flow cytometry (FACS)



Flow cytometry analysis of ENO1, 2 in LNCap cells. The cell was stained with ATGA0424 at 2-5ug for  $1 \times 10^6$  cells (red). A Goat anti mouse IgG (Alexa fluor 488) was used as the secondary antibody. Mouse monoclonal IgG was used as the isotype control (blue), cells without incubation with primary and secondary antibody was used as the negative control (black).