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.

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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

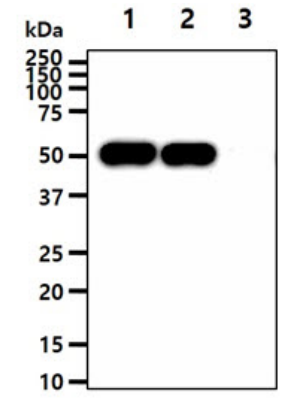
Alpha-enolase, also known as Enolase 1, is one of three enolase isoenzymes and a glycolytic enzyme expressed in most tissues. This protein plays a key role in anaerobic metabolism under hypoxic conditions and may act as a cell surface plasminogen receptor during tissue invasion. Abnormal expression of 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

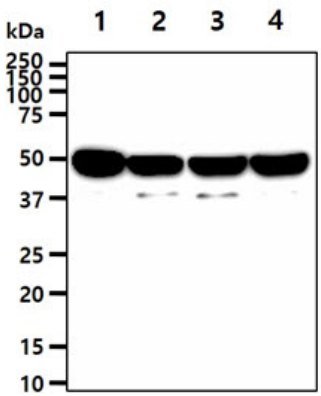
Das R., et al. (2009) Blood. 113(22): 5371-2.
Ueno NT., et al. (2008) Cancer Res. 68(22): 9302-10.

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)

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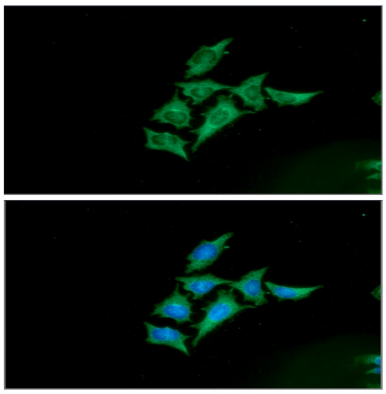
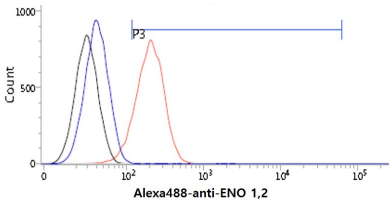


ICC/IF analysis of ENO1, 2 in HeLa cells. The cell was stained with ATGA0424 (1:100). The secondary antibody (green) was used Alexa Fluor 488. DAPI was stained the cell nucleus (blue).

Flow cytometry (FACS)



Flow cytometry analysis of ENO1, 2 in LNCap cells. The cell was stained with ATGA0424 at 2-5ug for 1x10^6cells (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).