

**Product Name: CD298 Mouse Monoclonal Antibody****Catalog #: AMM82582**

For research use only.

**Summary**

|                      |   |
|----------------------|---|
| <b>Description</b>   | Mouse monoclonal Antibody   |
| <b>Host</b>          | Mouse   |
| <b>Application</b>   | IHC,ELISA,FC  |
| <b>Reactivity</b>    | Human   |
| <b>Conjugation</b>   | Unconjugated  |
| <b>Modification</b>  | Unmodified  |
| <b>Isotype</b>       | Mouse IgG1  |
| <b>Clonality</b>     | Monoclonal  |
| <b>Form</b>          | Liquid  |
| <b>Concentration</b> | 1mg/ml  |
| <b>Storage</b>       | Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles. |
| <b>Shipping</b>      | Ice bags  |
| <b>Buffer</b>        | Purified antibody in PBS with 0.05% sodium azide                            |
| <b>Purification</b>  | Affinity Purification   |

**Application**

|                         |  |
|-------------------------|--|
| <b>Dilution Ratio</b>   | IHC 1:200-1:1000,ELISA 1:5000-1:20000,FC 1:200-1:400 |
| <b>Molecular Weight</b> | 31.5kDa  |

**Antigen Information**

|                          |   |
|--------------------------|---|
| <b>Gene Name</b>         | CD298   |
| <b>Alternative Names</b> | ATP1B3; ATPB-3  |
| <b>Gene ID</b>           | 483.0   |
| <b>SwissProt ID</b>      | P54709  |
| <b>Immunogen</b>         | Purified recombinant fragment of human CD298 (AA: extra 57-279) expressed in E. Coli. |

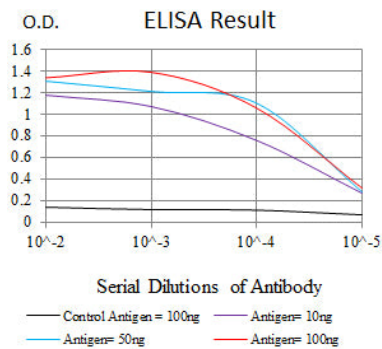
**Background**

The protein encoded by this gene belongs to the family of Na<sup>+</sup>/K<sup>+</sup> and H<sup>+</sup>/K<sup>+</sup> ATPases beta chain proteins, and to the subfamily of Na<sup>+</sup>/K<sup>+</sup> -ATPases. Na<sup>+</sup>/K<sup>+</sup> -ATPase is an integral membrane protein responsible for establishing and maintaining the electrochemical gradients of Na and K ions across the plasma membrane. These gradients are essential for osmoregulation,

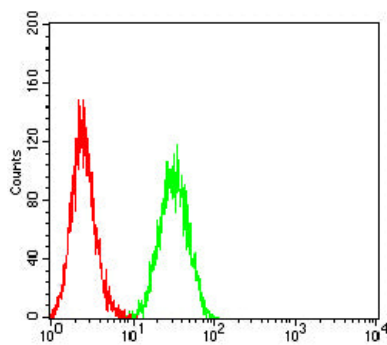
for sodium-coupled transport of a variety of organic and inorganic molecules, and for electrical excitability of nerve and muscle. This enzyme is composed of two subunits, a large catalytic subunit (alpha) and a smaller glycoprotein subunit (beta). The beta subunit regulates, through assembly of alpha/beta heterodimers, the number of sodium pumps transported to the plasma membrane. The glycoprotein subunit of Na<sup>+</sup>/K<sup>+</sup> -ATPase is encoded by multiple genes. This gene encodes a beta 3 subunit. This gene encodes a beta 3 subunit. A pseudogene exists for this gene, and it is located on chromosome 2.

## Research Area

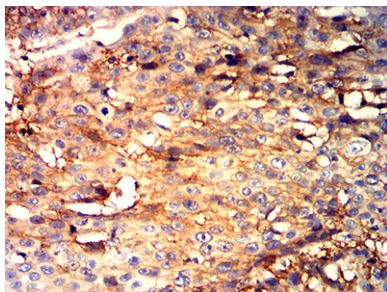
## Image Data



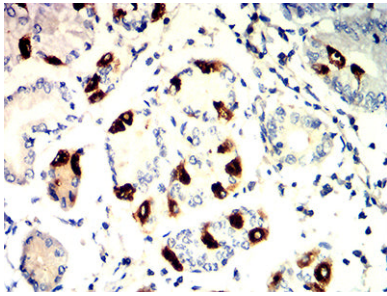
Black line: Control Antigen (100 ng);Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line:Antigen (100 ng)



Flow cytometric analysis of THP-1 cells using CD298 mouse mAb (green) and negative control (red).



Immunohistochemical analysis of paraffin-embedded human lung cancer tissues using CD298 mouse mAb with DAB staining.



Immunohistochemical analysis of paraffin-embedded human stomach tissues using CD298 mouse mAb with DAB staining.