

## Anti-CAPNS1 Rabbit mAb

Purified Recombinant Rabbit Monoclonal Antibody

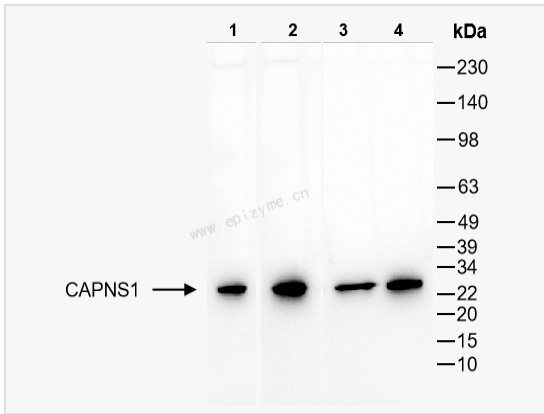
Catalog # R016160

### Product Information

|             |   |
|-------------|---|
| Application | WB, IHC-P/IF (Tissue-P)   |
| Reactivity  | WB (Human), IHC-P/IF (Tissue-P) (Human, Mouse, Rat)   |
| Dilution    | WB 1:1,000~1:2,000; IHC-P 1:100~1:200   |
| Host        | Rabbit  |
| Clonality   | Monoclonal  |
| Clone No.   | 38H33K89  |
| Isotype     | IgG   |
| Label       | Unconjugated  |
| Immunogen   | Recombinant protein of human CAPNS1   |
| Format      | Affinity purified monoclonal antibody supplied in PBS with 0.02% sodium azide and 50% glycerol, pH 7.3.                     |
| Storage     | Shipped on wet ice. Store at -20°C. Stable for 24 months from date of receipt. Aliquoting is unnecessary for -20°C storage. |
| Precautions | Anti-CAPNS1 Rabbit mAb [38H33K89] is for research use only and not for use in diagnostic or therapeutic procedures.         |

### Protein Information

|                   |   |
|-------------------|---|
| Synonyms          | CAPN4; CAPNS; CAPNS1; Calpain small subunit 1; CSS1; Calcium-activated neutral proteinase small subunit; Calcium-dependent protease small subunit; Calcium-dependent protease small subunit 1; Calpain regulatory subunit; CANP small subunit; CDPS.  |
| Calculated MW     | Calculated MW: 28 kDa; Observed MW: 28 kDa  |
| Uniprot ID        | P04632  |
| Gene ID           | 826   |
| Background        | This gene is a member of the calpain small subunit family. Calpains are calcium-dependent cysteine proteinases that are widely distributed in mammalian cells. Calpains operate as heterodimers, comprising a specific large catalytic subunit (calpain 1 subunit in Calpain I, and calpain 2 subunit in Calpain II), and a common small regulatory subunit encoded by this gene. This encoded protein is essential for the stability and function of both calpain heterodimers, whose proteolytic activities influence various cellular functions including apoptosis, proliferation, migration, adhesion, and autophagy. Calpains have been implicated in neurodegenerative processes, such as myotonic dystrophy. A pseudogene of this gene has been defined on chromosome 1. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Oct 2014] |
| Cellular Location | Cytoplasm. Cell membrane. Note: Translocates to the plasma membrane upon calcium binding.   |
| Tissue Location   | Low tissue specificity. Expressed in metanephros cortex and 206 other cell types or tissues.  |



Western Blot - Anti-CAPNS1 Rabbit mAb [38H33K89]

All lanes: R016160 at 1:1,000 dilution

Lane 1: HCT116 (Human colorectal carcinoma epithelial cell) whole cell lysates

Lane 2: U87 (Human malignant glioblastoma epithelial cell) whole cell lysates

Lane 3: K562 (Human chronic myeloid leukemia cell) whole cell lysates

Lane 4: U2OS (Human osteosarcoma epithelial cell) whole cell lysates

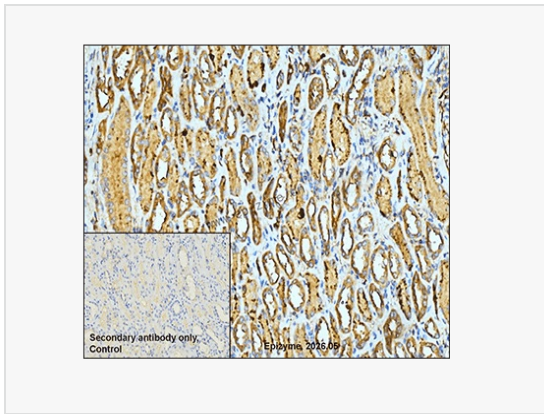
Lysates/proteins at 20 µg per lane.

Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP conjugated (LF102) with dilution of 1:2,000

Predicted band size: 28 kDa

Observed band size: 28 kDa

Developed using the ECL technique (Cat. No. SQ201).



Immunohistochemistry - Anti-CAPNS1 Rabbit mAb [38H33K89]

Sample: Paraformaldehyde-fixed, paraffin embedded human lung cancer tissue

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.

Primary antibody: R016160 at 1:200 dilution

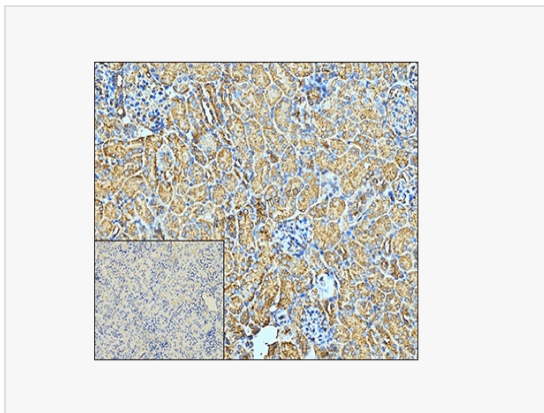
Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP conjugated at 1:1,000 dilution

DAB was used as the chromogen.

Counter stained with hematoxylin.

Positive/negative staining were presented.

Only the secondary antibody was used as the negative control.



Immunohistochemistry - Anti-CAPNS1 Rabbit mAb [38H33K89]

Sample: Paraformaldehyde-fixed, paraffin embedded mouse lung tissue

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.

Primary antibody: R016160 at 1:200 dilution

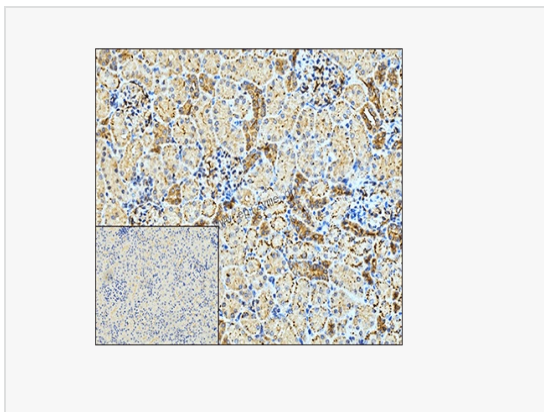
Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP conjugated at 1:1,000 dilution

DAB was used as the chromogen.

Counter stained with hematoxylin.

Positive/negative staining were presented.

Only the secondary antibody was used as the negative control.



Immunohistochemistry - Anti-CAPNS1 Rabbit mAb [38H33K89]

Sample: Paraformaldehyde-fixed, paraffin embedded rat lung tissue

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.

Primary antibody: R016160 at 1:200 dilution

Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP conjugated at 1:1,000 dilution

DAB was used as the chromogen.

Counter stained with hematoxylin.

Positive/negative staining were presented.

Only the secondary antibody was used as the negative control.