abcam

**ab204952**

# Anti-Epsin 1 antibody [6F7F9]

## Key facts

| | |
|---|---|
| **Isotype** | IgG1 |
| **Host species** | Mouse |
| **Storage buffer** | Preservative: 0.05% Sodium azide Constituents: PBS |
| **Form** | Liquid |
| **Clonality** | Monoclonal |
| **Immunogen** | Recombinant Fragment Protein within Human Epsin-1 aa 100-300. The exact immunogen used to generate this antibody is proprietary information. Database link Q9Y6I3 |
| **Clone number** | 6F7F9 |
| **Purification technique** | Affinity purification Protein G |
| **Concentration** | 1 mg/mL The concentration of this product may be batch-dependent<br>Batch concentration finder → |
| **Purification notes** | Purified from tissue culture supernatant. |

## Reactivity data

## Flow Cyt

### Tested

| | |
|---|---|
| **Species** | Human |
| **Dilution info** | 1/200 - 1/400 |
| **Notes** | - |

### Not recommended

| | |
|---|---|
| **Species** | Recombinant full length protein, Transfected cell lysate - Human |
| **Dilution info** | - |
| **Notes** | - |

## WB

### Tested

| | |
|---|---|
| **Species** | Recombinant full length protein |
| **Dilution info** | 1/500 - 1/2000 |
| **Notes** | - |

| | |
|---|---|
| **Species** | Transfected cell lysate - Human |
| **Dilution info** | 1/500 - 1/2000 |
| **Notes** | - |

### Expected

| | |
|---|---|
| **Species** | Human |
| **Dilution info** | Use at an assay dependent concentration. |
| **Notes** | - |

## Target data

See full target information Epsin-1

| | |
|---|---|
| **Function** | Binds to membranes enriched in phosphatidylinositol 4,5-bisphosphate (PtdIns(4,5)P2). Modifies membrane curvature and facilitates the formation of clathrin-coated invaginations (By similarity). Regulates receptor-mediated endocytosis (PubMed:10393179, PubMed:10557078). |

## Storage

| | |
|---|---|
| **Shipped at conditions** | Blue Ice |
| **Appropriate short-term storage duration** | 1-2 weeks |

| | |
|---|---|
| **Appropriate short-term storage conditions** | +4°C |
| **Appropriate long-term storage conditions** | -20°C |
| **Aliquoting information** | Upon delivery aliquot |
| **Storage information** | Avoid freeze / thaw cycle |

## Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

| | |
|---|---|
| **Activity summary** | Epsin 1 commonly referred to as EPN1 is a protein that primarily participates in the process of endocytosis. It exhibits a molecular mass of approximately 68 kDa. Epsin 1 is found mainly in the cytoplasm but also shows a high expression in the brain indicating its importance in neurological functions. Additionally alternative splicing can lead to different isoforms enriching its functional diversity. |
| **Biological function summary** | Epsin 1 works as an endocytic accessory protein that plays a role in clathrin-mediated endocytosis facilitating the internalization of various receptors and membrane proteins. It interacts with clathrin and AP-2 adaptor complex helping to deform the membrane to form vesicles. Epsin 1 is known to bind phospholipids via its ENTH domain which is important for its function at the plasma membrane. This protein does not work alone and is part of larger protein complexes that include other proteins involved in vesicle formation and maturation. |
| **Pathways** | Epsin 1 participates in the endocytic pathway essential for the regulation of nutrient uptake and signaling receptor modulation. It coordinates with proteins such as dynamin and adaptin ensuring the proper invagination of the membrane and vesicle scission. Epsin 1 is also linked to the actin cytoskeleton affecting pathways linked to signal transduction and cellular organization. |
| **Associated diseases and disorders** | Epsin 1 has been implicated in cancer and neurological disorders. Abnormal expression levels of Epsin 1 have been associated with tumor progression and metastasis particularly in breast cancer. This correlation suggests that Epsin 1 may influence pathways with epidermal growth factor receptor (EGFR) known for its role in cancer cell proliferation. Moreover its prominent expression in neurons indicates a possible connection to neurodegenerative diseases where similar proteins like amyloid precursor protein (APP) are involved raising interest in its potential role in Alzheimer's disease. |

## Product promise

**Tested**

We have tested this species and application combination and it works. It is covered by our product promise.

**Expected**

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

**Predicted**

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

**Not recommended**

We do not recommend this combination. It is not covered by our product promise.

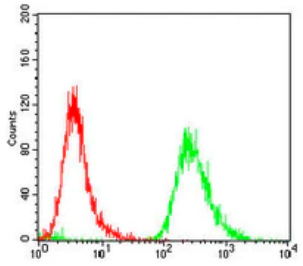
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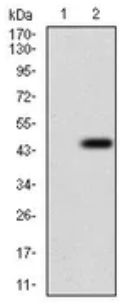
## 3 product images




### Flow Cytometry - Anti-Epsin 1 antibody [6F7F9] (ab204952)

Epsin 1 Flow Cytometry staining using mouse Anti-Epsin 1 antibody

Flow cytometric analysis of A431 cells labeling Epsin 1 with ab204952 at 1/200 dilution (green) or negative control (red)



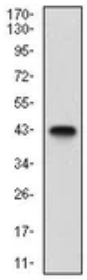

### Western blot - Anti-Epsin 1 antibody [6F7F9] (ab204952)

All lanes:
Western blot - Anti-Epsin 1 antibody [6F7F9] (ab204952) at 1/500 dilution

Lane 1:
HEK293 cell lysate

Lane 2:
Epsin 1 (106-254) - hIgGFc transfected HEK293 cell lysate

Predicted band size: 60 kDa




## Western blot - Anti-Epsin 1 antibody [6F7F9] (ab204952)

(Expected MW is 42.4 kDa)
All lanes:
Western blot - Anti-Epsin 1 antibody [6F7F9] (ab204952) at 1/500 dilution

All lanes:
Recombinant Epsin 1 (aa 106-254) protein

Predicted band size: 60 kDa

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.