abcam

**ab60110**

# Anti-ORP8 antibody [mAbcam 60110]

## Key facts

| | |
|---|---|
| **Isotype** | IgG1 |
| **Host species** | Mouse |
| **Storage buffer** | pH: 7.4 Preservative: 0.02% Sodium azide Constituents: PBS, 6.97% L-Arginine, 1% BSA |
| **Form** | Liquid |
| **Clonality** | Monoclonal |
| **Immunogen** | The exact immunogen used to generate this antibody is proprietary information. |
| **Clone number** | mAbcam 60110 |
| **Purification technique** | Affinity purification |
| **Concentration** | 1 mg/mL The concentration of this product may be batch-dependent<br>Batch concentration finder → |

## Reactivity data

## Flow Cyt (Intra)

### Tested

| | |
|---|---|
| **Species** | Human |
| **Dilution info** | 1-2 µg for $10^6$ Cells |
| **Notes** | ab170190 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody. |

### Predicted

| | |
|---|---|
| **Species** | Horse, Chimpanzee |
| **Dilution info** | - |
| **Notes** | - |

## WB

### Tested

| | |
|---|---|
| **Species** | Human |
| **Dilution info** | 5 µg/mL |
| **Notes** | We recommend using 3% milk as the blocking agent in Western Blot. |

### Predicted

| | |
|---|---|
| **Species** | Horse, Chimpanzee |
| **Dilution info** | - |
| **Notes** | - |

## Target data

See full target information OSBPL8

**Function** Lipid transporter involved in lipid countertransport between the endoplasmic reticulum and the plasma membrane: specifically exchanges phosphatidylserine with phosphatidylinositol 4-phosphate (PI4P), delivering phosphatidylserine to the plasma membrane in exchange for PI4P, which is degraded by the SAC1/SACM1L phosphatase in the endoplasmic reticulum. Binds phosphatidylserine and PI4P in a mutually exclusive manner (PubMed:26206935). Binds oxysterol, 25-hydroxycholesterol and cholesterol (PubMed:17428193, PubMed:17991739, PubMed:21698267).

## Storage

| | |
|---|---|
| **Shipped at conditions** | Blue Ice |
| **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 |

## Notes

**Want a custom formulation?**
This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or conjugation for your experiments, please contact orders@abcam.com

## Supplementary info

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

| | |
|---|---|
| **Activity summary** | Oxysterol-binding protein-related protein 8 (ORP8) also known as OSBP-related protein 8 is a member of the oxysterol-binding protein (OSBP) family. This protein has a mass of around 104 kDa. ORP8 is expressed in various tissues with notable expression in the liver and brain. Mechanically ORP8 functions as a lipid transporter mediating cholesterol and phosphoinositide transfer between cellular membranes. It contains a pleckstrin homology domain and an oxysterol-binding domain which facilitate its role in lipid exchange and signaling processes. |
| **Biological function summary** | ORP8 influences membrane lipid composition and cellular lipid metabolism. It regulates cholesterol homeostasis and participates in lipid signaling pathways. Although ORP8 is not a known component of larger protein complexes it interacts with other lipid-regulating entities modulating cellular responses to lipid fluctuations. This regulation maintains cellular energy balance and membrane integrity critical aspects of cellular physiology. |
| **Pathways** | ORP8 actively contributes to cholesterol metabolism and phosphoinositide signaling pathways. It interacts directly with key regulators such as the endoplasmic reticulum-resident protein VAP and phosphatidylinositol 4-kinase. These interactions help orchestrate cholesterol and lipid distribution within cells linking ORP8 to broader metabolic processes and lipid signaling events. These pathways highlight ORP8's role in maintaining cellular lipid equilibrium. |
| **Associated diseases and disorders** | ORP8 potentially associates with conditions like atherosclerosis and liver disease. Dysregulation of its lipid transport functions may lead to abnormal lipid accumulation which underpins atherosclerosis development. Additionally ORP8 interacts with proteins implicated in lipid metabolism disorders connecting it to liver disease pathogenesis. Its interactions with VAP and other metabolic proteins emphasize the importance of ORP8 in disease contexts where lipid balance is disrupted. |

## 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.

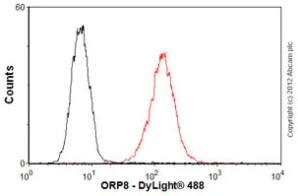
---

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

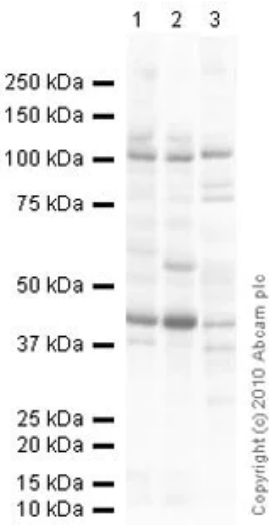
## 3 product images




### Flow Cytometry (Intracellular) - Anti-ORP8 antibody [mAbcam 60110] (ab60110)

ORP8 Flow Cytometry (Intracellular) staining using mouse Anti-ORP8 antibody

Overlay histogram showing HEK293 cells stained with ab60110 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab60110, 1µg/1x$10^6$ cells) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H+L) (ab96879) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG1 [ICIGG1] (ab91353, 2µg/1x$10^6$ cells) used under the same conditions. Acquisition of >5,000 events was performed. This antibody gave a positive signal in HEK293 cells fixed with 4% paraformaldehyde (10 min)/permeabilized with 0.1% PBS-Tween for 20 min used under the same conditions.




# Western blot - Anti-ORP8 antibody [mAbcam 60110] (ab60110)

1% BSA was used as a blocking agent.
All lanes:
Western blot - Anti-ORP8 antibody [mAbcam 60110] (ab60110) at 5 µg/mL

Lane 1:
HEK293 (Human embryonic kidney cell line) Whole Cell Lysate at 10 µg

Lane 2:
THP1 (Human acute monocytic leukemia cell line) Whole Cell Lysate at 10 µg

Lane 3:
Human kidney tissue lysate - total protein (ab30203) at 10 µg

Secondary

All lanes:
Goat polyclonal to Mouse IgG - H&L - Pre-Adsorbed (HRP) at 1/3000 dilution

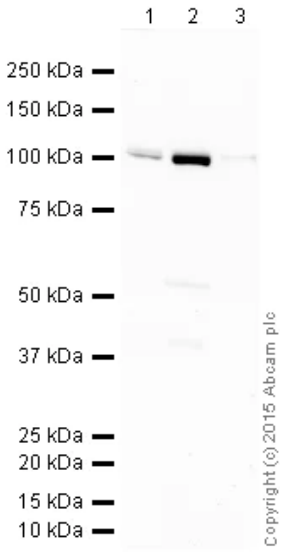
Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 101 kDa

Observed band size: 101 kDa, 44 kDa, 55 kDa, 80 kDa, 85 kDa

Exposure time: 30s




# Western blot - Anti-ORP8 antibody [mAbcam 60110] (ab60110)

ORP8 Western blot staining using mouse Anti-ORP8 antibody

We recommend using 3% milk as the blocking agent in Western Blot.
All lanes:
Western blot - Anti-ORP8 antibody [mAbcam 60110] (ab60110) at 5 µg/mL

Lane 1:
HEK293 (Human embryonic kidney cell line) Whole Cell Lysate at 10 µg

Lane 2:
THP1 (Human acute monocytic leukemia cell line) Whole Cell Lysate at 10 µg

Lane 3:
Human kidney tissue lysate - total protein (ab30203) at 10 µg

Secondary

All lanes:
Goat polyclonal to Mouse IgG - H&L - Pre-Adsorbed (HRP) at 1/10000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 101 kDa

Observed band size: 101 kDa

Exposure time: 8min

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