abcam

**ab248907**

# Anti-EXOC2 antibody [EPR9420] - BSA and Azide free

Recombinant | RabMAb

## Key facts

| | |
|---|---|
| **Isotype** | IgG |
| **Host species** | Rabbit |
| **Storage buffer** | pH: 7.2 - 7.4 Constituents: PBS |
| **Form** | Liquid |
| **Clonality** | Monoclonal |
| **Immunogen** | The exact immunogen used to generate this antibody is proprietary information. |
| **Carrier free** | Yes |
| **Clone number** | EPR9420 |
| **Purification technique** | Affinity purification |

## Reactivity data

## ICC/IF

**Not recommended**

| | |
|---|---|
| **Species** | Human, Mouse, Rat |
| **Dilution info** | - |
| **Notes** | - |

## IP

### Not recommended

| | |
|---|---|
| **Species** | Human, Mouse, Rat |
| **Dilution info** | - |
| **Notes** | - |

## WB

### Tested

| | |
|---|---|
| **Species** | Human |
| **Dilution info** | - |
| **Notes** | - |

### Predicted

| | |
|---|---|
| **Species** | Mouse, Rat |
| **Dilution info** | - |
| **Notes** | - |

## IHC-P

### Not recommended

| | |
|---|---|
| **Species** | Human, Mouse, Rat |
| **Dilution info** | - |
| **Notes** | - |

## Flow Cyt (Intra)

### Tested

| | |
|---|---|
| **Species** | Human |
| **Dilution info** | - |
| **Notes** | - |

### Predicted

| | |
|---|---|
| **Species** | Mouse, Rat |
| **Dilution info** | - |
| **Notes** | - |

## Target data

See full target information EXOC2

| | |
|---|---|
| **Function** | Component of the exocyst complex involved in the docking of exocytic vesicles with fusion sites on the plasma membrane. |

## Storage

| | |
|---|---|
| **Shipped at conditions** | Blue Ice |
| **Appropriate short-term storage conditions** | +4°C |
| **Appropriate long-term storage conditions** | +4°C |
| **Storage information** | Do Not Freeze |

## Notes

ab248907 is the carrier-free version of ab140620.

**Patented technology**

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

**What are the advantages of a recombinant monoclonal antibody?**

This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free batch production

For more information, read more on recombinant antibodies.

**Conjugation ready**

Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with 1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

**Compatibility**
This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc.

## Supplementary info

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

| | |
|---|---|
| **Activity summary** | The exocyst complex component 2 also known as EXOC2 or SEC5 is an important protein involved in vesicle trafficking. EXOC2 has an estimated mass of around 105 kDa. It is widely expressed in various tissues highlighting its broad significance in cellular processes. Its primary role is to participate in the tethering of secretory vesicles to specific sites on the plasma membrane aiding in processes like cell migration and growth. |
| **Biological function summary** | EXOC2 acts as a fundamental part of the exocyst complex which comprises eight proteins. This complex orchestrates vesicle targeting and tethering during exocytosis a process essential for maintaining cell surface area and membrane protein composition. Unlike other vesicle trafficking complexes the exocyst shows significant specificity for certain vesicles and localization contributing to the precision of membrane-associated functions. |
| **Pathways** | EXOC2 joins key pathways like the insulin signaling pathway and the regulation of actin cytoskeleton. In the insulin signaling pathway EXOC2 integrates with components such as the protein Rab11 to mediate glucose transporter vesicle trafficking impacting glucose uptake. In the regulation of the actin cytoskeleton it interacts with actin-related proteins to influence cell shape and motility. |
| **Associated diseases and disorders** | Connection with EXOC2 influences conditions such as cancer and diabetes. Abnormal EXOC2 expression links to various cancers often through disruptions in cellular trafficking and signal transduction. The interplay with diabetes arises partly through its role in insulin-mediated processes with proteins like Rab11 that affect glucose homeostasis. These associations highlight the potential for EXOC2 as a therapeutic target in these diseases. |

## 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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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.

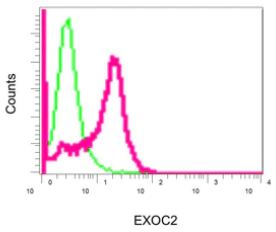
In the unlikely event of one of our products not working as expected, you are covered by our product promise.

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

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## 3 product images

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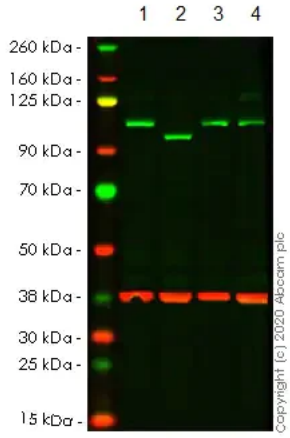



### Flow Cytometry (Intracellular) - Anti-EXOC2 antibody [EPR9420] - BSA and Azide free (ab248907)

EXOC2 Flow Cytometry (Intracellular) staining using rabbit Anti-EXOC2 antibody

This data was developed using ab140620, the same antibody clone in a different buffer formulation.
Intracellular flow cytometric analysis of permeabilized BxPC-3 cells labelling EXOC2 with ab140620 at 1/10 dilution (red) or a Rabbit IgG negative control (green).

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### Western blot - Anti-EXOC2 antibody [EPR9420] - BSA and Azide free (ab248907)

EXOC2 Western blot staining using rabbit Anti-EXOC2 antibody

This data was developed using the same antibody clone in a different buffer formulation (ab140620).
**Lanes 1- 4:** Merged signal (red and green). Green - ab140620 observed at 104 kDa. Red - Anti-GAPDH antibody [6C5] - Loading Control (ab8245) observed at 37 kDa.

ab140620 was shown to react with EXOC2 in wild-type HeLa cells in western blot. The band observed in CRISPR/Cas9 edited cell line ab265839 (CRISPR/Cas9 edited cell lysate ab257944) lane below 104kDa may represent truncated forms and cleaved fragments. This has not been investigated further. Wild-type HeLa and EXOC2 CRISPR/Cas9 edited HeLa cell lysates were subjected to SDS-PAGE. Membrane was blocked for 1 hour at room temperature in 0.1% TBST with 3% non-fat dried milk. ab140620 and Anti-GAPDH antibody [6C5] - Loading Control (ab8245) were incubated overnight at 4°C at a 1 in 1000 dilution and a 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye®800CW) preadsorbed (ab216773) and Goat anti-Mouse IgG H&L (IRDye®680RD) preadsorbed (ab216776) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.

All lanes:
Western blot - Anti-EXOC2 antibody [EPR9420] (ab140620) at 1/1000 dilution

Lane 1:

Wild-type HeLa cell lysate at 20 µg

Lane 2:
EXOC2 CRISPR/Cas9 edited HeLa cell lysate at 20 µg

Lane 2:
Western blot - Human EXOC2 knockout HeLa cell line (ab265839)

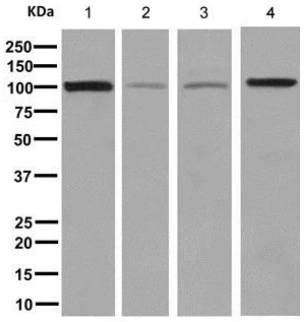
Lane 3:
SH-SY5Y cell lysate at 20 µg

Lane 4:
Daudi cell lysate at 20 µg

Performed under reducing conditions.

Predicted band size: 104 kDa

Observed band size: 104 kDa




## Western blot - Anti-EXOC2 antibody [EPR9420] - BSA and Azide free (ab248907)

This data was developed using ab140620, the same antibody clone in a different buffer formulation.
All lanes:
Western blot - Anti-EXOC2 antibody [EPR9420] (ab140620) at 1/1000 dilution

Lane 1:
BxPC-3 cell lysate at 10 µg

Lane 2:
Human placenta tissue lysate at 10 µg

Lane 3:
Fetal brain tissue lysate at 10 µg

Lane 4:
SH-SY5Y cell lysate at 10 µg

Predicted band size: 104 kDa

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