abcam

**ab137080**

# Anti-TROY antibody [EPR3214(2)]

Recombinant | RabMAb

## Key facts

| | |
|---|---|
| **Isotype** | IgG |
| **Host species** | Rabbit |
| **Storage buffer** | pH: 7.2 - 7.4 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA |
| **Form** | Liquid |
| **Clonality** | Monoclonal |
| **Immunogen** | The exact immunogen used to generate this antibody is proprietary information. |
| **Clone number** | EPR3214(2) |
| **Purification technique** | Affinity purification Protein A |
| **Concentration** | 0.811 mg/mL The concentration of this product may be batch-dependent<br>Batch concentration finder → |

## Reactivity data

### IP

**Not recommended**

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

### WB

### Tested

| | |
|---|---|
| **Species** | Human |
| **Dilution info** | 1/1000 - 1/10000 |
| **Notes** | - |

### Predicted

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

## IHC-P

### Not recommended

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

## ICC/IF

### Not recommended

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

## Flow Cyt (Intra)

### Tested

| | |
|---|---|
| **Species** | Human |
| **Dilution info** | 1/100 - 1/500 |
| **Notes** | ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody. |

**Predicted**

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

## Target data

See full target information TNFRSF19

| | |
|---|---|
| **Function** | Can mediate activation of JNK and NF-kappa-B. May promote caspase-independent cell death. |

## Storage

| | |
|---|---|
| **Shipped at conditions** | Conditional Ambient |
| **Appropriate short-term storage conditions** | +4°C |
| **Appropriate long-term storage conditions** | -20°C |

## Notes

**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.

## Supplementary info

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

| | |
|---|---|
| **Activity summary** | The TROY protein also known as TNFRSF19 is a member of the tumor necrosis factor receptor superfamily. It has a molecular mass of approximately 42 kDa. TROY is mainly expressed in the central nervous system particularly in brain tissue but researchers also detect it in certain peripheral tissues. The protein contains an extracellular domain a single transmembrane segment and a cytoplasmic domain that interacts with other intracellular signaling proteins. These structural components allow it to function effectively in signal transduction throughout the cells. |
| **Biological function summary** | TROY protein plays a significant role in the central nervous system's development and maintenance. It interacts with components of the neurotrophin signaling pathway including p75 neurotrophin receptor to influence neuronal survival and differentiation. TROY does not function alone; it is part of receptor complexes that modulate various intracellular pathways. Its interactions with ligands like Nogo receptor and LINGO-1 indicate its involvement in restricting neuronal growth impacting axon regeneration and central nervous system repair processes. |
| **Pathways** | The TROY protein integrates into neurotrophin signaling and axon guidance pathways. In neurotrophin signaling it affects cellular response to growth factors essential for neural growth and survival. In axon guidance TROY impacts cellular navigation cues that direct axon growth. This protein interacts closely with other molecules such as the Nogo receptor which often collaborates in signaling cascades that influence these pathways. These interactions underline TROY's contribution to maintaining the delicate balance of neuronal connections. |
| **Associated diseases and disorders** | TROY protein has links to neurodegenerative disorders like Alzheimer's disease and multiple sclerosis. Alzheimer's disease research shows that TROY might influence amyloid-beta peptide interactions exacerbating neuronal degradation processes. Similarly in multiple sclerosis the protein's role in inhibiting axon regrowth makes it a potential target for therapeutic intervention. TROY's interaction with proteins such as p75 and Nogo receptor highlights its influence on disease progression by mediating cellular processes that relate to neurodegeneration and neuron damage response. |

## 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**

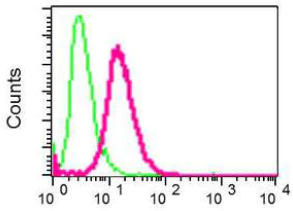
We do not recommend this combination. It is not covered by our product promise.

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.

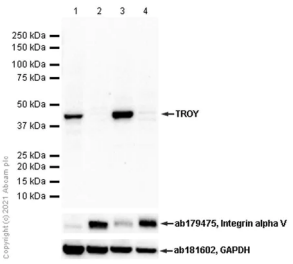
## 3 product images




### Flow Cytometry (Intracellular) - Anti-TROY antibody [EPR3214(2)] (ab137080)

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

Intracellular flow cytometric analysis of permeabilized A431 cells labelling TROY with ab137080 at 1/100 dilution (red) or a rabbit IgG (negative) (green).




### Western blot - Anti-TROY antibody [EPR3214(2)] (ab137080)

TROY Western blot staining using rabbit Anti-TROY antibody

Blocking buffer and concentration: 5% NFDM/TBST
Diluting buffer and concentration: 5% NFDM/TBST
All lanes:
Western blot - Anti-TROY antibody [EPR3214(2)] (ab137080) at 1/10000 dilution

Lane 1:
RAW 264.7 (Mouse Abelson murine leukemia virus-induced tumor macrophage) without membrane fraction lysate at 20 µg

Lane 2:
RAW 264.7 (Mouse Abelson murine leukemia virus-induced tumor macrophage) membrane fraction lysate at 20 µg

Lane 3:
THP-1 (Human monocytic leukemia monocyte) without membrane fraction lysate at 20 µg

Lane 4:
THP-1 (Human monocytic leukemia monocyte) membrane fraction lysate at 20 µg

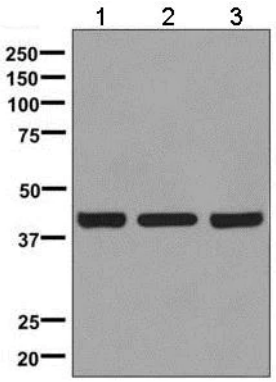
Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

Predicted band size: 46 kDa

Observed band size: 45 kDa

Exposure time: 120s




# Western blot - Anti-TROY antibody [EPR3214(2)] (ab137080)

All lanes:
Western blot - Anti-TROY antibody [EPR3214(2)] (ab137080) at 1/1000 dilution

Lane 1:
LnCaP cell lysates at 10 µg

Lane 2:
A431 cell lysates at 10 µg

Lane 3:
PC3 cell lysates at 10 µg

Secondary

All lanes:
goat anti-rabbit HRP at 1/2000 dilution

Predicted band size: 46 kDa

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