abcam

**ab128487**

# Anti-Thrombopoietin antibody [1B11]

## Key facts

| | |
|---|---|
| **Isotype** | IgG2a |
| **Host species** | Mouse |
| **Storage buffer** | Preservative: 0.05% Sodium azide Constituents: PBS |
| **Form** | Liquid |
| **Clonality** | Monoclonal |
| **Immunogen** | Recombinant Fragment Protein within Human THPO aa 250 to C-terminus. The exact immunogen used to generate this antibody is proprietary information. Database link P40225 |
| **Clone number** | 1B11 |
| **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** | ab170191 - Mouse monoclonal IgG2a, is suitable for use as an isotype control with this antibody. |

### Not recommended

| | |
|---|---|
| **Species** | Recombinant fragment, Recombinant fragment - Human |
| **Dilution info** | - |
| **Notes** | - |

## ELISA

### Tested

| | |
|---|---|
| **Species** | Recombinant fragment |
| **Dilution info** | 1/10000 |
| **Notes** | - |

### Expected

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

### Not recommended

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

## WB

### Tested

| | |
|---|---|
| **Species** | Recombinant fragment - Human |
| **Dilution info** | 1/500 - 1/2000 |
| **Notes** | - |

### Expected

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

### Not recommended

| | |
|---|---|
| **Species** | Recombinant fragment |
| **Dilution info** | - |
| **Notes** | - |

## Target data

See full target information THPO

| | |
|---|---|
| **Function** | Lineage-specific cytokine affecting the proliferation and maturation of megakaryocytes from their committed progenitor cells. It acts at a late stage of megakaryocyte development. It may be the major physiological regulator of circulating platelets. |

## 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 |

## Supplementary info

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

| | |
|---|---|
| **Activity summary** | Thrombopoietin also known as TPO is an important glycoprotein hormone with a mass of about 70 kDa. It is primarily produced in the liver but can also be found in the kidneys and bone marrow stromal cells. Thrombopoietin binds to and activates |

| | |
|---|---|
| | its receptor c-Mpl which is present on hematopoietic progenitor cells. This protein has a significant role in regulating the production of blood platelets by stimulating the proliferation and differentiation of megakaryocytes the precursor cells for platelets. |
| **Biological function summary** | Thrombopoietin functions in hematopoiesis by supporting the maturation of megakaryocytes. It operates independently but can interact with other factors to optimize platelet production. Although it does not form a part of a large protein complex it is essential for the proper function of hematopoietic progenitors across several stages of differentiation. Its activity ensures the maintenance of platelet levels in the bloodstream therefore preventing conditions like thrombocytopenia. |
| **Pathways** | Thrombopoietin plays a critical role in the megakaryocyte/platelet lineage pathway. It directly influences the JAK-STAT (Janus kinase-signal transducer and activator of transcription) signaling pathway which is vital for driving the cell cycle and promoting cell survival. Thrombopoietin shares a functional connection with EPO (erythropoietin) which is involved in red blood cell production although they act on different lineage-specific progenitors. |
| **Associated diseases and disorders** | Thrombopoietin is intricately linked to conditions like thrombocytopenia where there are abnormally low platelet counts and thrombocythemia characterized by elevated platelet levels. Dysregulation of Thrombopoietin production or its receptor activity can lead to these disorders. It has a relationship with other hematopoietic growth factors like GM-CSF (granulocyte-macrophage colony-stimulating factor) which can also influence the disorders of blood cell lines. Understanding its signaling pathways provides insights into therapeutic targets for diseases involving platelet imbalances. |

## 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**

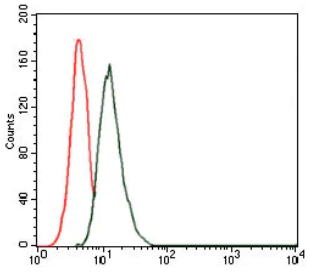
We do not recommend this combination. It is not covered by our product promise.

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.

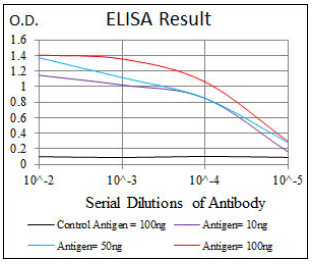
## 3 product images




### Flow Cytometry - Anti-Thrombopoietin antibody [1B11] (ab128487)

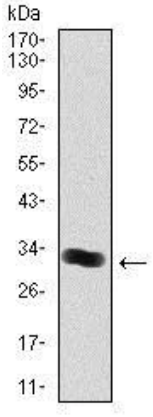
Thrombopoietin Flow Cytometry staining using mouse Anti-Thrombopoietin antibody

ab128487, at a 1/200 dilution, staining Thrombopoietin in MCF7 cells by Flow Cytometry (green). Negative control is shown in red.




### ELISA - Anti-Thrombopoietin antibody [1B11] (ab128487)

ELISA using ab128487.




### Western blot - Anti-Thrombopoietin antibody [1B11] (ab128487)

Expected MWt of recombinant protein is 30 kDa.
All lanes:
Western blot - Anti-Thrombopoietin antibody [1B11] (ab128487) at 1/500 dilution

All lanes:
Human Thrombopoietin (amino acids 250-303) recombinant protein

Predicted band size: 37 kDa

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